The Builder

INCORPORATING ARCHITECTURE & THE BRITISH ARCHITECT

Vol. CCI. September 29th 1961 No. 6176

Published from 'The Builder' House, 4 Catherine-street, Aldwych, London, WC2. Telephones: Temple Bar 6251-4.

Annual subscription rate: £4. Special rate for Students following an approved architectural or technical course: 30s. Single copies (including back numbers, where available, up to 12 months old) 1s. 6d. (post paid 2s.). Indices free on application.

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Leading Article

Urban Housing and Replanning

THE ABANDONMENT by the Victorians of our eighteenth-century tradition of compact urban planning and terrace housing has left us with what MR. ERIC LYONS, in the stimulating address which he gave recently to the Town and Country Planning Summer School, described as a 'grey, tired mess of nineteenth-century houses where so many of us have to live, or that must be crossed to reach the brighter, newer mess of garden-city type low-density sprawl that must be crossed to reach the fields with their hedgerows of cars carrying refugees to their dormitory villages or small towns, or to the sea, or anywhere away from the city.'

What is to be done about the immense problem of urban renewal thus presented? Mr. Lyons suggested that the answer is grouped housing, not only for the sense of community it imparts but because it means economic and sensible use of land and good town planning and also enables the use of modern building techniques by repetitive design. Apart from the work of some of our great local authorities, such as the LCC, and some of our larger firms of speculative housebuilders, there is little sign of such enlightened principles being put into practice. Domestic redevelopment in the older inner suburbs of most of the big cities is now taking place in piecemeal fashion and, although much of it shows a considerable improvement architecturally, it is on far too small a scale to permit of good planning.

In fact, a pattern is beginning to emerge that is clearly undesirable. It is by no means uncommon to see an area of about a quarter of an acre, formerly occupied, perhaps, by a large early Victorian house, packed with 'units of accommodation' in the form of flats or terrace houses, or a combination of the two, the whole of the site, except for some tiny fenced-in back gardens, being concreted over and furnished with a row of garages, one for each unit. In the process most of the vegetation disappears. If this sort of thing is allowed to continue the new suburbia will be no great improvement on the old.

Clearly redevelopment must be on a much larger scale to allow for proper planning and landscaping, which latter must be an integral part of the layout. The creation and maintenance of common space, as Mr. Lyons pointed out, is vital to residential amenity, and if the burden cannot be borne by local authorities then new techniques of management and maintenance cost-sharing ought to be devised. The multiplicity of small ownerships is the main obstacle to large-scale redevelopment. If this could be overcome then, with proper architectural and landscaping control, and sympathetic co-operation between developers and local authorities, there would be good hope for the future. The great amount of unsatisfactory small-scale redevelopment now being carried out must seriously prejudice good replanning. Matters should not be allowed any longer to drift.

Notes of the Week

Maintenance Cost of Schools ; Midland Design Centre ; Mr. H. Hubbard Ford

MAINTENANCE COST OF SCHOOLS has recently been discussed by the Lancashire County Education Committee which recently approved estimates of over £21,000 for repairs to five post-war schools. Inadequate structural watertightness has occurred at all five buildings, and drainage trouble has been met with at two of them. Flooring defects in internal public spaces are noted in all five.

Not unnaturally, the county council is concerned that comparatively new buildings should be in need of repair, and one councillor is pressing for an investigation. But the blame for what has happened is placed on the Ministry of Education's doorstep by Alderman Cheall who said that the repair work had been made necessary by reason of the 'skimped' nature of the specifications made inevitable by the Ministry's cost ceiling.

* * *

IT IS FAIR TO SAY that the County Architect does not accept this interpretation. In communicating the facts which influenced the original design, he states (see p. 605) that these schools were part of a total of 25 which were designed by his predecessor (Mr. G. Noel Hill) to a standard design so that one set of plans would suffice, with minor addendum drawings for foundations. 'At the same time, there was a local demand for cheaper schools and, as a result of the design of the standard school and the repetitive working drawings, the cost of the schools was in fact greatly reduced below the financial standards of the Ministry of Education. There was no pressure on Lancashire from the Ministry of Education to do this' emphasises Mr. Simmons, who goes on to add that the total saving below Ministry cost limits was £128,000 for the 25 schools and this, after repair work is completed on the five schools in question, will still show a saving of over £100,000 on the programme—'an experiment in economics in which certain calculated risks had to be taken by the County Architect and his Committees. . . . To recap, the schools were built quickly and solved a great problem in providing places for children ; the exercise in economics has been successful.'

* * *

IN VIEW OF MR. SIMMONS' EXPLANATION, it may well be that any further investigation into this particular programme is unnecessary. But it does raise the question of schools maintenance in more general terms, for many educational authorities have been exercised in their minds on the subject. We ourselves in a leading article on June 12, 1959, said 'Although the architects have been able to reduce the floor area, utilise space two or three times over, and reduce surface finishes, floor finishes and exterior treatments to the minimum, the question of the long-term maintenance of these buildings, if costs are reduced further, is one which must be worrying education authorities over the country as a whole, particularly bearing in mind that allocations for education now come out of the block grant.'

Perhaps it is time that there was an investigation, on a general basis, with the object of establishing whether the amount of maintenance of education buildings erected to MoE cost limits is in any way general or excessive. This is a matter on which the Ministry should act.

The Midland Design and Building Centre

PREPARATIONS are now under way for the move early next year by the Midland Design and Building Centre to new and larger premises built for it by the Nottingham Corporation estates department. The Centre's director, Mr. D. P. Bromley, who took up his appointment on August 21, reports that the first year (the Centre was inaugurated on October 4 last year) has been an eminently successful one in which some 25,000 visitors attended.

During 1962 the Centre's programme will include, in addition to its permanent building and design exhibitions, frequent 'impact exhibitions' which will be fully publicised; the provision of lecture, meeting and film show facilities for bodies connected with architecture, building and design; publication of a monthly journal; and the establishment of an active public relations department.

Mr. H. Hubbard Ford, FRIBA

WE ARE GLAD TO WRITE that Mr. H. Hubbard Ford, FRIBA, JP, whose name was, through mistaken identity, included in our Obituary column last week, is alive and well and is continuing his extensive practice in London, Eastbourne and Hove. In apologising to Mr. Hubbard Ford for our untimely act, we may perhaps be allowed to remind him that he is in good company; was it not Mark Twain who was similarly treated by a newspaper, to whom he wrote 'The report of my death is grossly exaggerated'?

A FOUNDATION CEREMONY: *a pleasant ceremony took place on September 21, on the site in Shoe-lane, EC4, of the Mechanical Car Park, when a casket enclosing coins, postage stamps, newspapers and a scroll with the names of the architects and others who had contributed to the design and construction was buried in the concrete foundations. The photograph shows (l. to r.) Mr. F. G. Mitchell, chairman of Mitchell Engineering Ltd.; Mr. Howard Lobb, CBE, FRIBA, the architect; and R. K. Melville and Donald Fraser of the joint company undertaking the work, Mitchell's and the Unit Construction Co. Ltd.*

Poet's Corner

IN A RECENT ADDRESS on Urban Housing to the Town and Country Planning Summer School, Mr. Eric Lyons advocated group design as the best method of redevelopment.

The labyrinth of urban sprawl
Shadows the lives of one and all
Who, dwelling there on passing through it,
Welcome proposals to renew it,
Many of which, unhappily,
Are not so good as they should be;
'Tis pity there's so little sign
Of well-considered group design.
These 'twilight' regions that benumb
The spirit might in time become
(By profiting from good advice)
A residential paradise.

ANON.

Civil Defence Centre, Hertfordshire

H. G. CHERRY & PARTNERS, architects in collaboration with
G. C. FARDELL, MBE, ARIBA, county architect
V. B. JOHNSON & PARTNERS, quantity surveyors
WOODSIDE BUILDERS LTD., general contractors

front elevation of main hall

lobby, towards hall

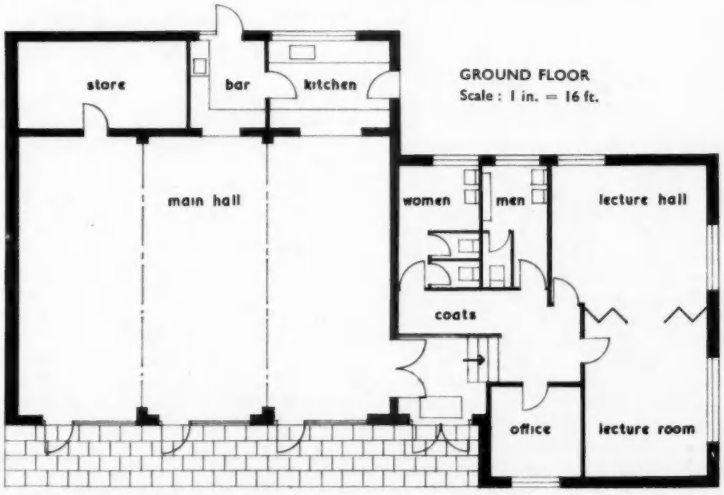
THE BUILDING is designed to be the centre of training and social activities for the local Civil Defence Corps.

Construction is traditional. 11-in. cavity walls support steel roof trusses and timber rafters covered with concrete slates. The contract price was £7,926 13s. 7d. of which total the external works accounted for £747 2s. 2d.

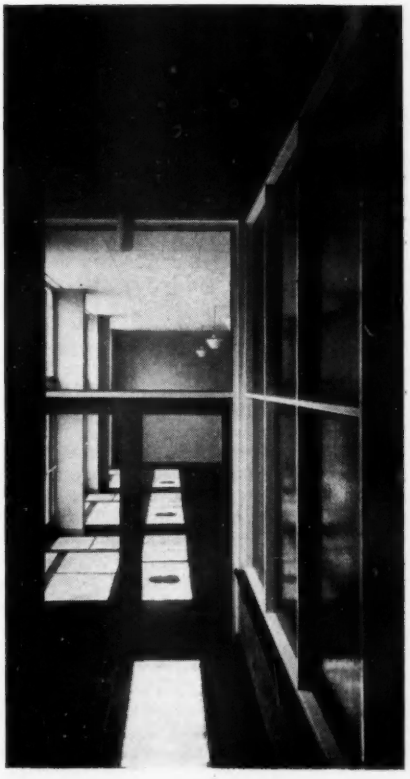
Superficial floor area: 2,106.4 sq. ft. Cost per sq. ft., £3 8s. Architect/partner in charge: R. de Yarburgh-Bateson, MA, ARIBA.

sub-contractors & suppliers:

Steelwork: Evans and Noel Ltd.; *facing bricks:* William Lockhart Ltd.; *roofing:* Pratt of Watford Ltd.; *roof slates:* Redland Tile Company; *w.c. partitions:* Venesta Ltd.; *sanitary fittings:* Standard Range and Foundry Company Ltd.; *electrical installation:* Wilsons Electrical Contractors; *ironmongery:* A. J. Binns (Hardware) Ltd.; *fencing:* Peerless Fence and Products Ltd.; *servery shutters:* Bond (SGD) Ltd.; *woodblock and thermoplastic tile flooring:* Bennetts Woodblock Boarding (Tungit) Co. Ltd.; *electrical fans:* Vent Axia Ltd.; *folding door gear:* Hill Aldam; *perspex lettering:* Drakard and Humble Ltd.



GROUND FLOOR
Scale: 1 in. = 16 ft.



Competition Award

Civic Centre, Lincoln

PROMOTERS: LINCOLN CITY COUNCIL
ASSESSORS: SIR LESLIE MARTIN, G. A. JELLICOE & J. M. RICHARDS
WINNERS: DENIS GAILEY, ARIBA, & ELDRED EVANS, AA DIPL

THE ARCHITECTURAL COMPETITION for a Civic Centre at Lincoln has been decided (as reported in 'The Builder' last week) in favour of the design No. 58, the authors of which are Mr. Denis Gailey, ARIBA, and Miss Eldred Evans, AADipl., of 41 Denning-road, Hampstead, NW3. They win the first premium of £4,000.

The remaining prize money of £3,000 is divided equally between the authors of design No. 7 (James Bourne, David Button, Stephen Osgood and H. Werner Rosenthal, the Studio, Graystead, Amersham, Bucks.); No. 19 (Gollins, Melvin, Ward & Partners, 15 Manchester-square, W1); and No. 59 (Andrew Renton, Peter Howard, John Kennett & Gerald Levin, 48 Queen Anne-street, W1).

The following entries are commended: No. 1 (Birkin Haward); No. 50 (Alan M. Thompson); and No. 53 (John Attenborough, Warren Chalk, Denis Crompton, Ron Herron, Terence Kennedy, John Roberts, Anthony Teague and Alan Waterhouse). There were 76 entries.

The Assessors' Report

FOLLOWING ARE EXTRACTS from the assessors' report:

The competition produced several interesting designs and one of outstanding merit. This, 58 [Gailey & Evans], is in our unanimous view a design of very great quality, offering a masterly solution to the complex problems posed and capable of producing a group of buildings which would endow the city of Lincoln with a civic centre of unusual appropriateness and distinction. When examined in detail it disclosed a number of minor faults, chiefly in internal planning, but we satisfied ourselves that these could be remedied, after further study on the part of the author, without requiring major modifications in the design and without changing its basic conception.

The estimate of the cost given by the author of No. 58 was within the limit set, but we were very doubtful whether, in the form shown in the drawings, it could be built for this sum. The design contains, however, certain extravagances, such as two levels of covered car park, with room for more cars than the conditions called for, a considerable foyer space beneath the area of the two halls and a smaller hall of unnecessary size, and once again we satisfied ourselves that, by modifying these, the design could be brought within the cost limit without changing it basically or losing any of the qualities that we had found so impressive.

There were half-a-dozen other designs deserving serious consideration, each with some very good qualities, but each of these also had some serious defects, and unlike the defects we had found in No. 58, they were defects inherent in the basic conception. None of these designs stood out sufficiently above the others to justify awarding it second prize. Three of these runners-up, Nos. 7, 19 and 59, seemed to us to be equal in merit, and we thought it fairest that they should share the remaining prize-money.

Competitors were set a highly complex problem, which was made both more difficult and more interesting by the opportunities it offered to influence the future layout and architectural development of the lower part of Lincoln. The decision to make Sincil-street pedestrian was clearly one of many important decisions that will soon be taken in this area. The best designs show an awareness of the possible role of the civic centre as a starting-point for wider developments. No. 58 in particular emphasises the relationship of the new levels which his design establishes to future replanning, based on the desirability of separating vehicles from pedestrians. No. 53 (one of the commended designs) does the same effectively, and No. 7 has given constructive thought to the possibility of linking the civic centre in the future, visually as well as functionally, with the rising ground across the river, though this design rather turns its back on its surroundings in other directions.

Providing the City with Focal Point

One role of the civic centre must be to furnish the lower part of the city, at present of a somewhat indeterminate character, with a focal point, and at the same time to bring older Lincoln on the hill and newer Lincoln lower down into a clear relationship with one another. This is where No. 58 stands alone among the competition entries. The group of buildings it proposes, compact enough to assert itself as a single entity, yet preserving interesting and agreeable spaces within the site, echoes in its proportions and silhouette the buildings on the hill below the cathedral (which forms the background to the scheme), and thus creates for the first time some visual unity between the old and new parts of the city. Although it promises to fall naturally into place in the Lincoln landscape, No. 58 has a strong and vigorous architectural character of its own, and the several elements in the group, clearly identifying themselves according to their different functions, are handled with remarkable control, with the council chamber appropriately rising up through the centre. No other design succeeds so happily in combining a relationship to the setting with the intelligent placing of the buildings on the site.

In contrast to the squarish blocks proposed by No. 58, some competitors employ long horizontal wings, especially for the offices. In the case of No. 59, the office wing is nearly 500 ft. long, creating difficulties of scale, though as this wing runs from south to north it has not the disadvantages of those that run the other way. These would form a horizontal barrier blocking the interior of the site from the important viewpoint at the foot of Pelham Bridge. One of the commended designs, No. 53, runs a barrier of this kind diagonally across the middle of the site, No. 1 places a large square block where it would have the same obstructive effect, and No. 7 not only runs a six-storey office block along the south side of the site, but makes the mistake of placing the police buildings on Melville-street on the east, with sunken parking and other unattractive yards along this important frontage. Apart from these errors of placing, however, and some minor planning defects, No. 7 is a thoughtful design with well handled domestically scaled buildings.

No. 7 is one of the few meritorious designs that has not chosen to cover in a large part of the site in the form of a raised piazza from which the buildings rise, providing car parks and service roads beneath. Such a raised piazza has obvious advantages, especially in view of the low ground level of the site, it being difficult to create an impressive group of buildings in a dip. Once again No. 58 handles a raised platform—or in this case a series of platforms at different levels—particularly well, both in relation to the surrounding landscape and to the spatial effects created within the site. Apart from the extravagances already mentioned, the defects of No. 58 are chiefly defects of detailed internal planning. Some of the entrances and approaches need improving and the allocation of space needs adjusting; there is too much space in some places and too little in others. It is necessary to draw attention to these defects, but we repeat that we are of the opinion that they can be remedied by further study without changing the design basically, the general planning of which, as well as the whole conception, is excellent.

The Runners-up

As to the three runners-up, we have already mentioned some of the much more basic defects, as well as the considerable merits, of No. 7, and the excessive length of the office wing in No. 59. This latter design is, on the whole, very cleanly planned. It provides pedestrian piazza across the site, continuing underneath the two long wings to form a roof terrace over the Sincil-street shops. The

mayor's entrance takes the form of an isolated staircase tower connected with the other buildings by a bridge, which we thought ineffectual; the approaches by car are rather poor. The architectural effect is disappointing.

No. 19 has a more positive architectural character and is laid out in three rectangular blocks well placed on the site, but (in contrast to designs which give separate expression to each element in the scheme) tries to incorporate such disparate elements as ranges of small offices, halls and council suite in one large hollow square, which become rather cumbersome and out of scale. The two halls are well related and the detailed planning good.

Design No. 1 is commended because of the neatness and efficiency of its plan (which again compresses the two halls and the council suite into one cubic envelope, denying itself the opportunity of using the variety of elements in the scheme expressively). No. 50, also commended, has a well worked-out plan, though the spaces created at piazza level between the buildings are not so satisfactory. The shops are interestingly planned. Finally, No. 53 has unusual interest in itself. Its 8-storey block, which has the effect of opening up the site elsewhere, would be massive in spite of its stepped outline. The access by car involves the use of somewhat tunnel-like approaches. Other designs, however, have this defect, underground access for the motorist, slightly lacking in dignity, being perhaps the price that has to be paid for spacious piazzas for the pedestrian.

Lincoln Preview

Mr. Arthur Kenyon, CBE, FRIBA, Dist.TP, who reviews the designs (76 in number) entered for this competition, spent several days in Lincoln before the award was announced on September 19. His impressions of the city which is now to have the new Civic Centre illustrated on pages 572-577 are recorded below; they were written before he saw the exhibition of designs. His comments, and the 'on-the-spot' sketches of the views from the site of the proposed centre, form a virtual background to the competition and to the design which has won it. Something of the spirit of Lincoln comes through, as well as something of the City's present planning problems.

FINDING MYSELF, after a lapse of many years, in Lincolnshire a few days before the competition results were to be announced, I decided to visit the City of Lincoln and see how kind man had been to this ancient city with its magnificent Cathedral on the crown of the hill, its few ancient buildings and gateways and its canalised waterway running through the lower part of the town.

Man 'Not Too Kind'

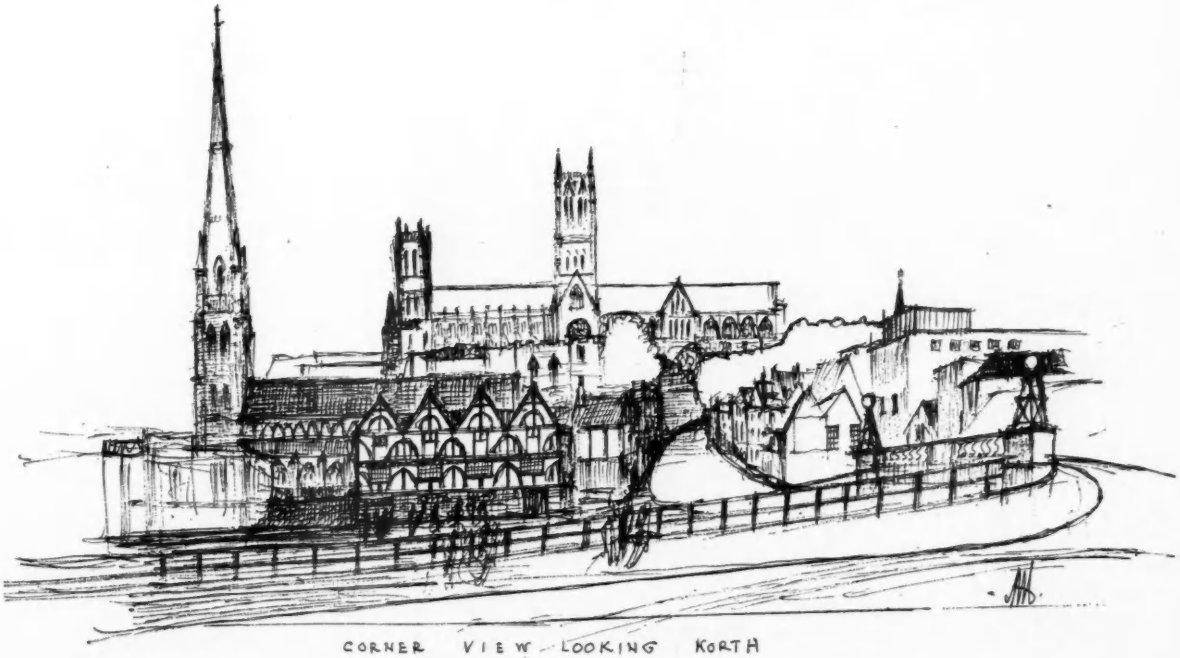
I found that man had not been too kind to it. The prewar work and the postwar buildings are of poor quality, without sympathy with the heritage of the past. All that seems to matter is the motor car: the town appears to be absorbed in them. The enormous car parks, with their attendants, are crowded as if for a pageant and the pageant in this instance, on this particular Saturday morning, is shopping. Even round the Cathedral cars and motor cycles race around. This, therefore, is a matter of great importance in the new Civic Centre and it is hoped that surface parking will be avoided in the winning design. The conditions call for provision for 120 cars (covered wholly or in part) with a further 40 cars in the amenity group.

The site for the Civic Centre has, no doubt, been carefully chosen and it affords a splendid opportunity of bringing a new dignity to the town and one which can set a note for any new surrounding development.

The City Engineer's Planning Department showed me their plan for a new inner ring road which is intended eventually to relieve the traffic in the centre of the town, and a new area being developed as a neighbourhood unit for 10,000 persons which will provide for overspill as well as rehousing, allowing more open spaces to be left in the town itself. The development which is now taking place consists mainly of rebuilding shop premises in various types of design, keeping to the old building frontages.

A Civic Centre 'Overdue'

The new Civic Centre will form a major development of the town and one which is long overdue. At present the



CORNER VIEW - LOOKING NORTH

Council Offices are scattered about the city in most unsuitable buildings and administration must be greatly inconvenienced. It is hoped that a solution will be found which arranges the various buildings in a manner indicated in the conditions, one which is part of the Cathedral landscape, and one which makes a first step towards the improvement of an important riverside frontage.

The buildings to be put on the site consist of:

1. The administrative offices and civic suite.

2. Two civic halls. Both general purpose halls: the larger one to seat 1,200 persons, with orchestra of 60 and choir of 200; the smaller hall for 500.

3. The magistrates' courts, with county and police headquarters.

4. 27 lock-up shops in Sincil-street. The cost was not to exceed £975,000.

The Designs Reviewed

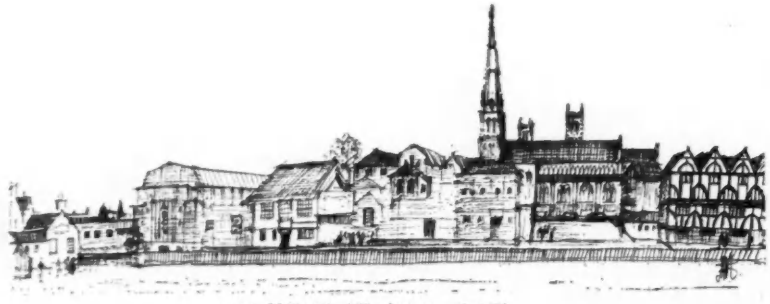
I VISITED the special council meeting at which the awards were to be announced with some feeling of excitement, being anxious to know how well the problem before the competitors had been solved. I was hoping that one of the assessors might have been there to explain the scheme to the Council and that some of the winning drawings might have been displayed. However, the assessors were missing though they had written an excellent report, a copy of which was handed round to the members, and a portion of this was read by the Chairman. The layout plan and two 'rushed' perspectives of the winners were on view. The names were not announced nor called for, and I felt somewhat disappointed at what appeared to be lack of enthusiasm amongst the members. This, however, was set right on the following day when what one hoped would be a quiet Press view turned out to be almost a preview for citizens, local architects and students.

Praise from the Assessors

As the assessors have made such a full and thoughtful report, my task is very much simplified. They are full of praise of the winning scheme which they consider to be of outstanding merit, a design of very great quality, offering a masterly solution to a complex problem. This is praise indeed, coming from three assessors to two young architects, one not yet fully qualified, and I should like here to add my praise to such well merited success.

It is a pleasure to see a scheme which has been designed for the purpose by competitors who have obviously absorbed the City's requirements and made a contribution to the lower part of the City which, at the moment, is completely lacking in form or character. So many of the schemes submitted were made to fit the site rather than being a contribution to the problem and would have done equally well in any other town in any other part of England.

Very few competitors have known how to embrace the river into their scheme although they had every opportunity as the site went up to the river bank. The winners have ignored it and have allowed the road to remain from the busy Melville-street to the busy High-street, through the market car park. They have put a new foot-bridge over the river which is neither sympathetic nor successful. I hope, when they begin to study their scheme in more detail, they will take this into account. Even if the river is only 30 ft. wide at this point, the swans bring dignity to it!



VIEW FROM THE SITE LOOKING NORTH

View looking West. The Market Hall

A Scheme with Feeling

Other competitors have planted trees close to the road in a negative way and No. 7 was the only one I saw which had any good feeling for the river and had realised that it formed a link with St. Swithin's Church and was bold enough to show his suggestion on his site plan, although it was beyond the limits of the competition area. But then, certain liberties were allowed. The winners, for instance, put in photographs of a rough model they had obviously made in studying the scheme, which of course is the only way to design a scheme on different levels, and one of the commended, No. 50, had done the reverse of what was asked and produced white on black drawings, which struck rather an irritating note and were not easy to read.

The assessors point out minor faults in detailed planning of the winners, but although some of these may be unorthodox, they are at least refreshing and in the office blocks, for instance, they avoid the proverbial corridor with lots of little rooms opening off, containing lots of little people in untidy surroundings with files and tea-cups keeping them company. Again the foyers and waiting spaces are unduly ample, but what a joy! There is more garage accommodation given than called for, but the winners knew there never could be too much in Lincoln and, thanks to the care taken, the cars are properly parked out of sight and are not allowed to litter the site.

It is hoped that in any endeavour to reduce the cost of the scheme, the ampleness of the plan will not be sacrificed.

A Doubtful Suggestion

I think the bridge from the site to the railway is a very doubtful suggestion. I realise it is on the main piazza level, but then so is the avenue of lock-up shops which is very foreign to the scheme, and I should think would prove financially unsuccessful. The ones facing the market at street level would, no doubt, continue their present use. Of the elevations, I would say they are rightly indecisive and require careful study, but the perspective shows a true feeling of plain surfaces to voids and in the three courts contained in this scheme there are opportunities of variation which will give interest to the scheme.

The Three 'Seconds'

Of the other three prize-winners, No. 59 had a raised Civic Square in the centre of the site, with car parking under and a 480 ft. long administration block, with the civic group to the north-east blocking the view to the Cathedral. The law courts were to the south-west. A tower had been introduced as an approach to the council suite, which in my opinion was a most unsuitable and unnecessary feature against the lofty spire of St. Swithin's Church and the three towers of the Cathedral beyond.

The long block had been quite well

handled but the scheme turned its back on the town. The drawings like so many others were very beautifully executed.

Surface Parking Unsuitable

No. 19 had, I felt, a wrong conception of the site. The surface car park for 114 cars on the south-east corner would spoil the appearance of the civic suite and would be the most prominent feature on approaching the city from Pelham Bridge, which is the principal approach into the town. The river front has been planted and brought into the scheme but it would afford little pleasure, as an approach road has been made along this front and through the site. The scheme, however, is very competently handled, but not one which is suitable for the occasion.

In reading the report of No. 7, it is obvious that this competitor had studied Lincoln and by the scattered blocks and his suggestion of bringing into the picture the land to the north, he was endeavouring to get a domestic scale into his project.

A Local Scheme

It was interesting to see at least one local scheme, No. 21 (Hall, Scorer and Bright) who had appreciated the importance of the river. This was a beautifully drawn scheme, but mounted on such enormous boards that they were difficult to handle.

Like many others, this competition has its value. High blocks generally are avoided as unsuitable, and lower and more domestic blocks are introduced. It is unfortunate that except the prize winning schemes, the 70 or so others were each displayed as a packet with one drawing covering the next so that it was impossible to get a general picture of the whole. It would be helpful if these could be hung in larger premises so that a more careful study could be made by those interested in the problem.

Excellent Draughtsmanship

The presentation of the schemes was good with some excellent draughtsmanship. I did not consider the ¼ in. scale elevation was necessary and this requirement might well have been omitted from the conditions.

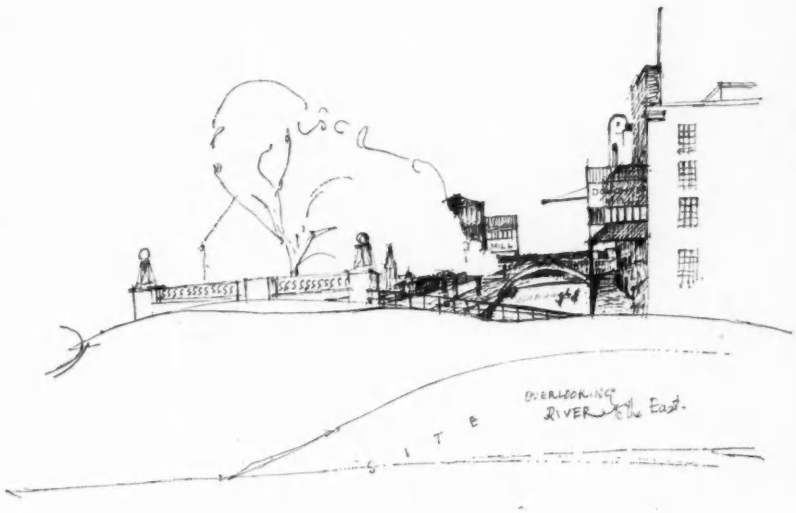
I feel the Council are to be congratulated in the response shown and the assessors on the care taken in their selection.

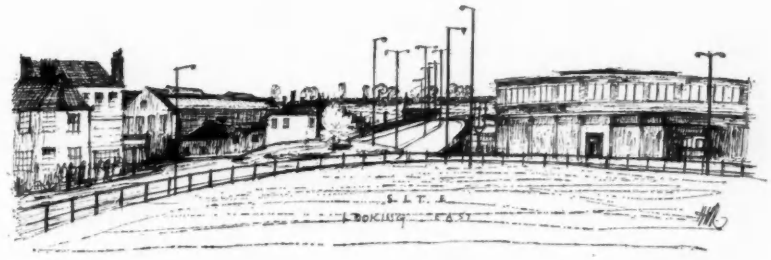
ARTHUR W. KENYON

The Competition Winners

Denis Gailey, ARIBA

Eldred Evans, AADipl.





Competitions Open

* *The date in italics refers to the issue of* The Builder *in which fuller details appeared.*

GOVERNMENT OFFICE BUILDING AND CONFERENCE CENTRE.—Competition sponsored by the Minister of Works for architects resident in the UK to submit designs for an office and conference building proposed to be erected on a site at Broad Sanctuary, Westminster. Sum allocated for the building is £800,000.

Assessors: Sir William Holford, MA, PRIBA, MTPI, Sir Leslie Martin, PhD, FRIBA, and Mr. Eric Bedford, CB, CVO, ARIBA.

Premiums: £3000, £2,000 and £1,000.

Dates: Designs by October 2; last day for questions, May 1.

Conditions: From the Secretary, Ministry of Works (AS&L), Lambeth Bridge House, London, SE1, deposit £2.

March 10.

MOTHERWELL AND WISHAW CIVIC CENTRE.—The Town Council of the Burgh of Motherwell and Wishaw invites architects resident in the UK to submit designs in a two-stage competition for a civic centre, to include public halls, municipal offices and shopping development. Six successful competitors in the first stage will be invited to submit more detailed designs for the second.

Assessor: Mr. A. G. Sheppard Fidler, MA, FRIBA, AMIPT.

Premiums: £500 for each of the six successful first-stage competitors, and £1,000 for design placed first at the final stage.

Dates: Designs for stage one by June 1, and for stage 2 by November 1. Last day for questions, April 1.

Conditions: From the Town Clerk, Town Hall, Motherwell, deposit 1 guinea.

February 3.

HOUSING FOR WATFORD RDC.—Competition sponsored by Watford Rural District Council for mixed residential development at Bedmond Village, Abbots Langley, Herts.

Assessor: Mr. Clifford Culpin, OBE, FRIBA.

Premiums: £750 for design placed first and further £750 to be divided in proportions to be decided by assessor between authors of next four designs.

Dates: Designs by October 2; last day for for questions, September 2.

Conditions: From the Clerk to the Council, Watford RDC, Wynyard House, Langley-road, Watford.

August 11.

CIVIC CENTRE, JOHANNESBURG. — Two-part competition, open to architects registered in South Africa and the those who have passed the RIBA final examinations or equivalent, for a new civic centre at Braamfontein.

Assessors: Mr. B. L. Loffell, city engineer, Professor Sir William Holford, MA, PRIBA, MTPI, Professor J. Fassler, Mr. John Cowin and Mr. Norman Hanson.

Premiums: Part I, £1,500, £1,250, £1,000 and £750; Part II, awards totalling £2,000 are offered additionally.

Dates: Details of qualifications from intending competitors by October 6; designs by June 8, 1962.

Conditions: From Town Clerk, PO Box 1049, Johannesburg, S. Africa, deposit £5.

August 11.

IDEAL HOME/RIBA GROUP HOUSING.—Competition sponsored by 'Ideal Home' magazine in association with the RIBA and open to architects to submit designs suitable for developing either or both of two sites, each of just over 4½ acres, at Harlow New Town, Essex, and at Stockport, Cheshire. This includes design of individual dwellings and their grouping on the sites.

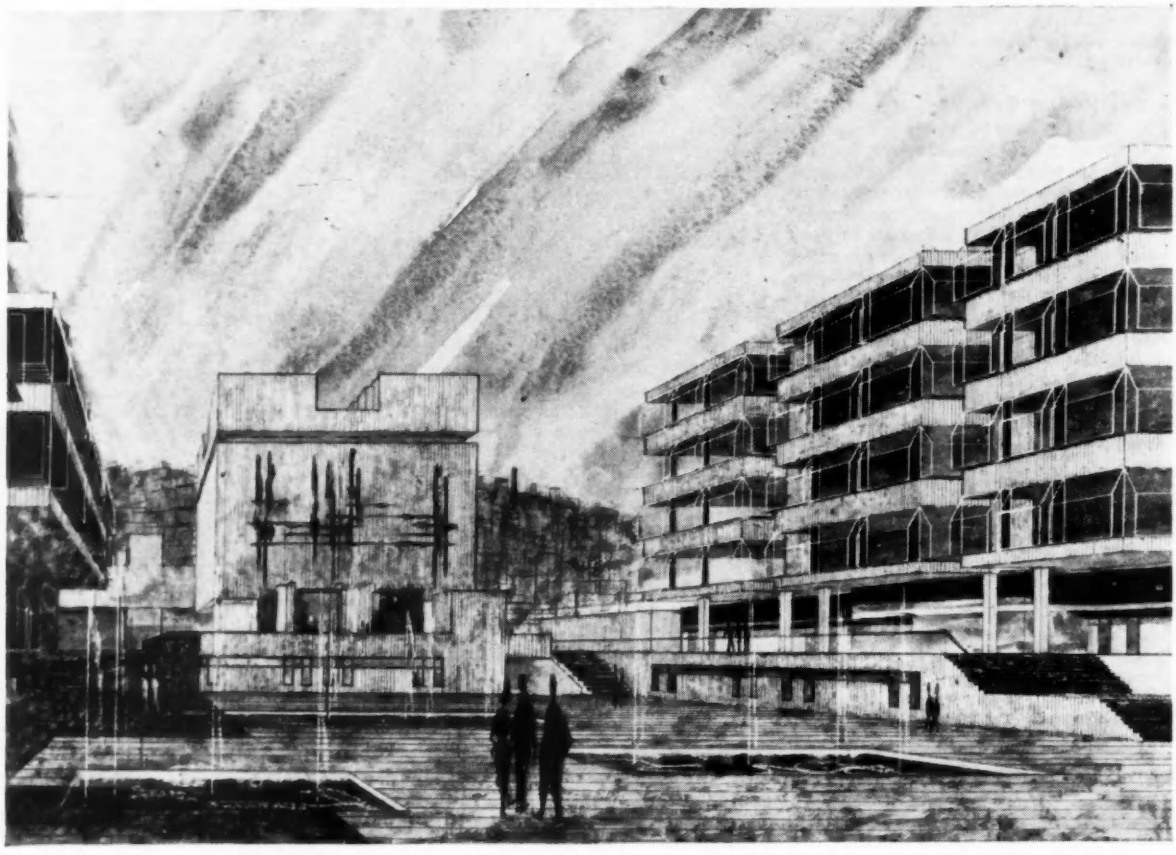
Assessors: Sir Basil Spence, OBE, RA, Mr. D. E. E. Gibson, CBE, FRIBA, and Mr. G. Grenfell Baines, OBE, FRIBA.

Premiums: £1,000, £350, £200 and six special awards of £50 for each site.

Dates: Designs by January 2, 1962.

Conditions: From the Royal Institute of British Architects, 66 Portland-place, London, W1, or from the 'Ideal Home' magazine.

September 1.



winning design, perspective of Courts' piazza

Lincoln Civic Centre

Winners' Report

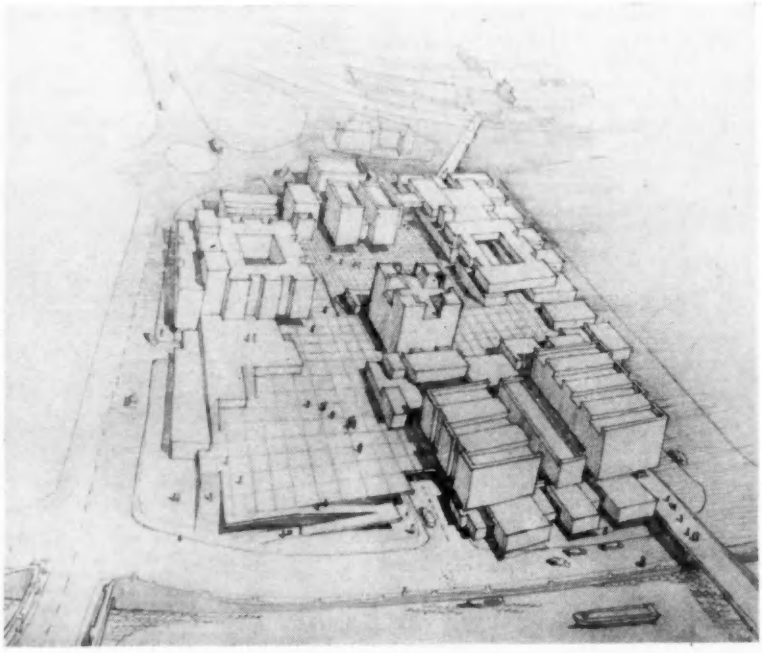
IT IS NOW an established fact that one of the main problems in preparing a design for city centre development is to provide vertical separation of vehicles and pedestrians. This problem was accentuated by the requirements as stated in the Civic Centre programme, in so far as a pedestrian precinct was required which conflicted with other planning requirements and access roads across the site.

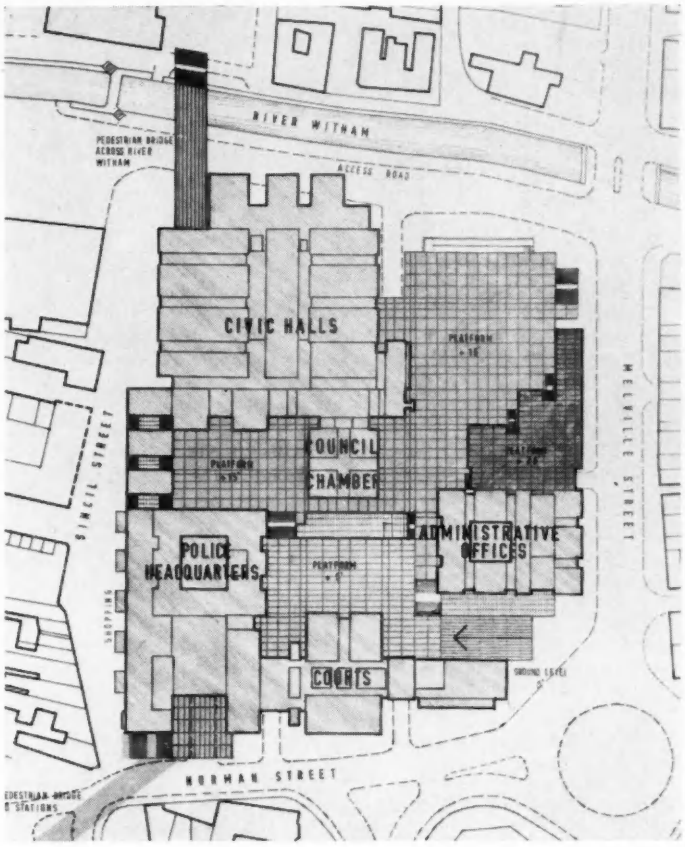
A new bridge across the river to a pedestrian deck is suggested as a first step in vertical separation and could be a basis for future development of the area across the river front. In addition, this deck would be extended to the south across Norman-street to connect the Civic Centre directly with the Railway Station and Bus Terminal.

Having decided on the necessity of a pedestrian deck, the Civic Centre problem is thus reduced to how best to relate the major volumes to one another in terms of planning and a formal expression, bearing in mind the scale of Lincoln itself and the relationship of the surrounding buildings to the site.

This proposal resolves itself in terms of the main elements being grouped

aerial perspective of site





site plan

around three varying deck levels, all interconnected and with differing aspects of the town—the most dominant to the north—the Cathedral.

Car parking areas occur under the podium and with these are combined the ancillary requirements of the various Centre buildings, so that the major elements themselves may be expressed as pure forms and their functions and relationships to each other made clear. Of these, the Council Chamber is felt to be dominant, and has been made the nucleus of the Centre, visible from all the spaces within the deck.

Foyer spaces, bars and shops are on the main deck, so that here civic, social and other functions can merge.

The structure proposed is principally 'in situ' reinforced concrete, as we are advised that this would provide the most economical answer compatible with ease and speed of building, while being the most readily adaptable system for this design.

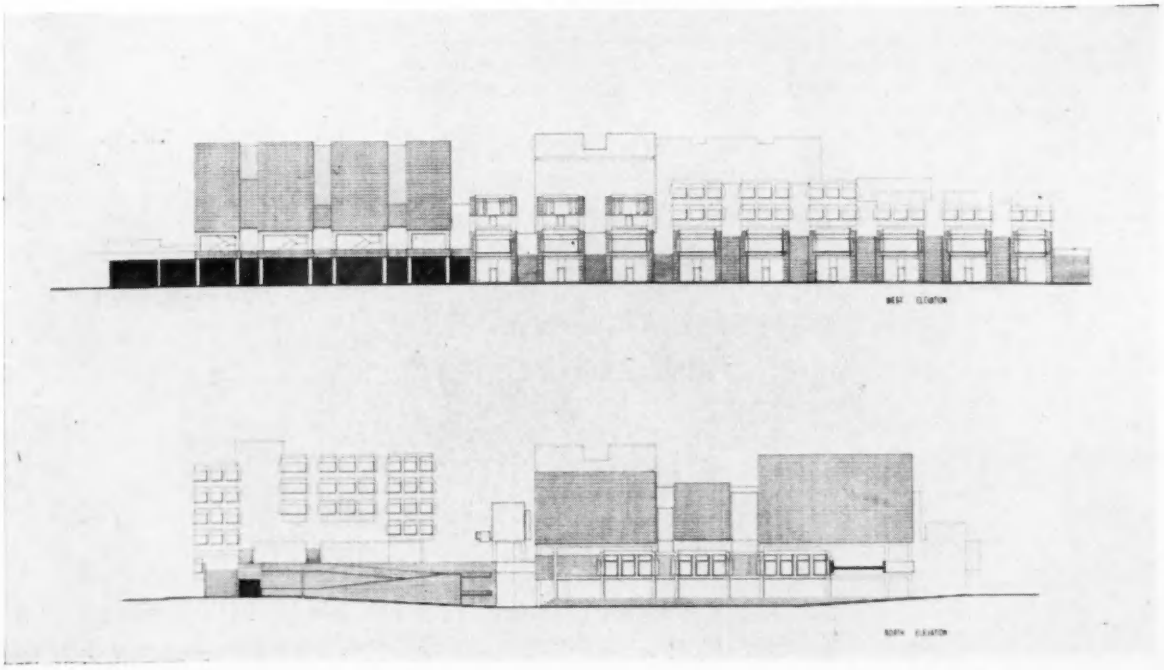
In certain limited areas to be described individually, we propose the use of pre-cast, and in some cases pre-cast post-tensioned, concrete.

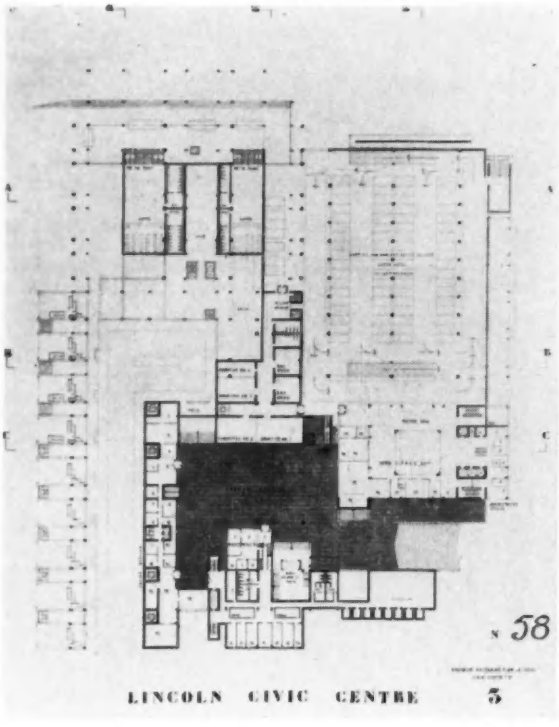
All buildings are faced externally with 1 ft. 6 in. x 6 in. x 1¼ in. buff clay semi-glazed tiles, which are deeply dove-tail keyed on the back and used as permanent shuttering to the 'in situ' concrete work. The concrete will be vibrated to ensure correct density and to ensure that the keys in the facing tiles are completely filled.

The principal fenestration for all build-

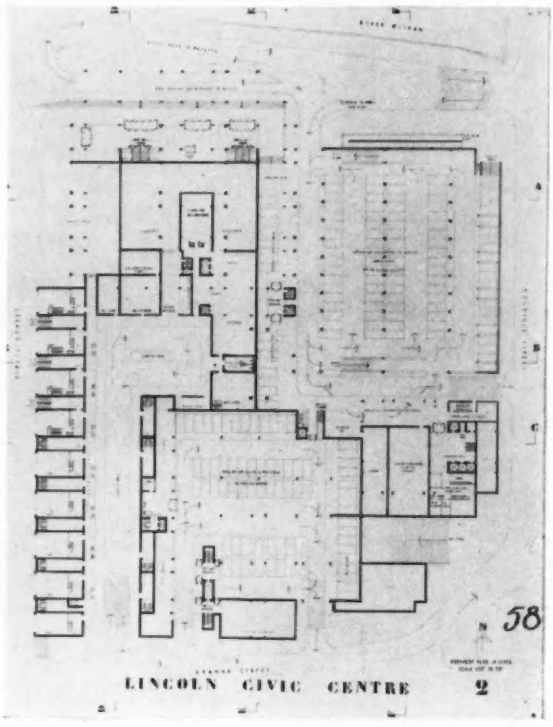
WINNING DESIGN: DENIS GAILEY, ARIBA, AND ELDRED EVANS, AA DIPL, architects

west and north elevations





basement mezzanine, +5 level



basement, −5 level

WINNING DESIGN: DENIS GAILEY, ARIBA, AND ELDRED EVANS, AA DIPL, architects

ings is composed of double glazing, each panel held in a separate aluminium frame, the inner frame openable for internal cleaning. Each glazed unit projects from the main face of the building and the space so formed between faces is used to provide controlled ventilation through aluminium louvres. All aluminium exposed to the weather is to be anodised black.

The piazzi are to be laid out with sculpture, water displays, planting and sitting areas, and paved with pre-cast units of varied shapes and colours appropriate to the areas. The river front is to be landscaped.

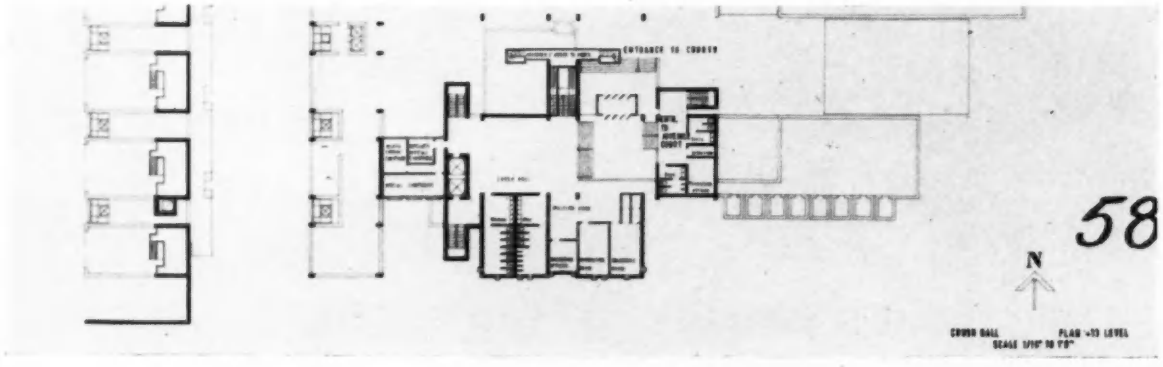
The buildings requiring a quiet environment, the Council Chamber, the Civic Halls and the Courts, are isolated from noisy areas both structurally and by their placing on the site.

They each have an exterior wall system involving two skins with a cavity between, which will insulate them effectively from exterior noise in the areas where they are located. The cut-offs to these areas from the surrounding accommodation are designed to give a minimum of 50 db. reduction.

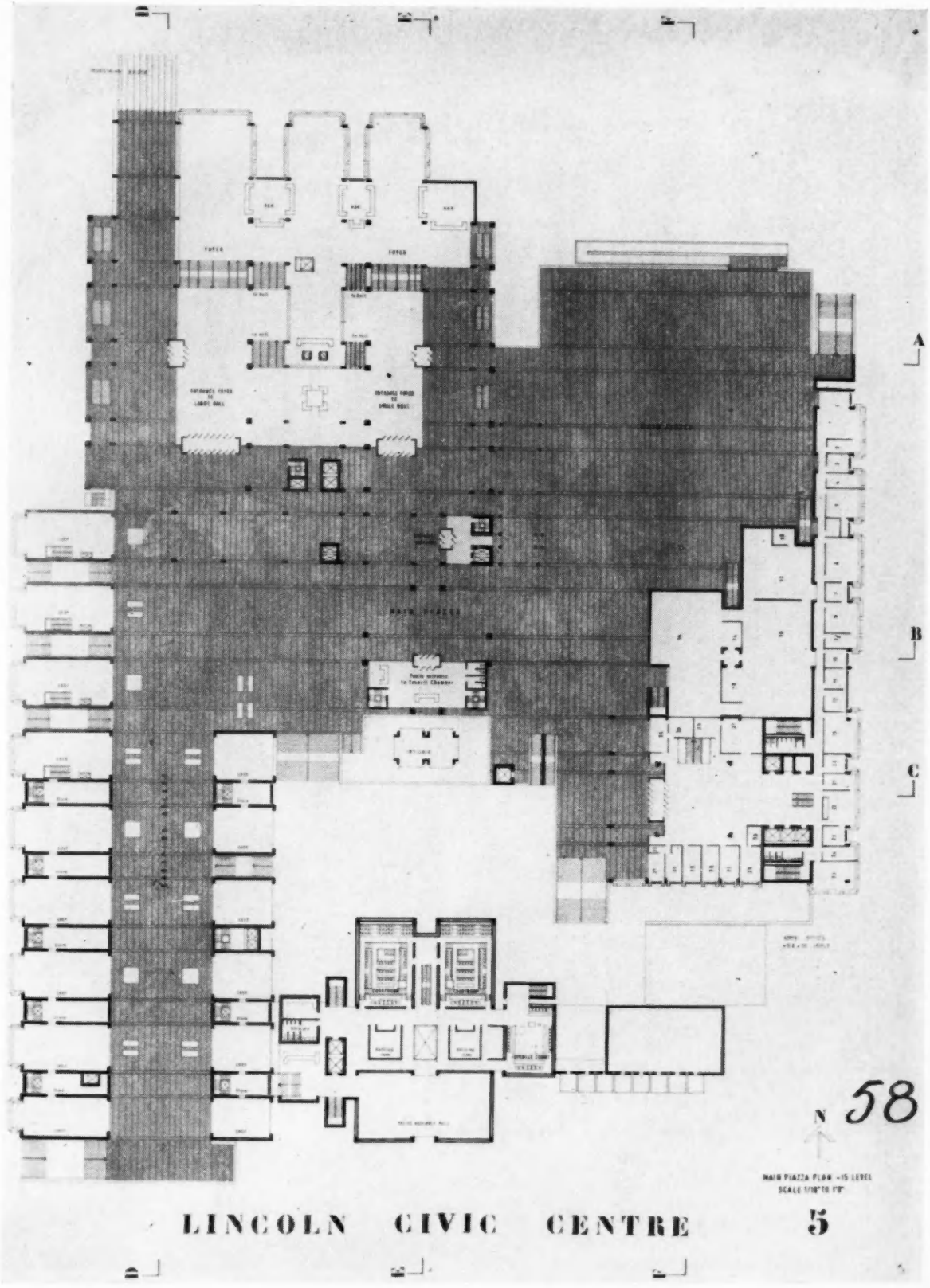
Executive offices are designed to have a 40 db. reduction from their surrounding areas and average offices a reduction of 30 db.

Costs

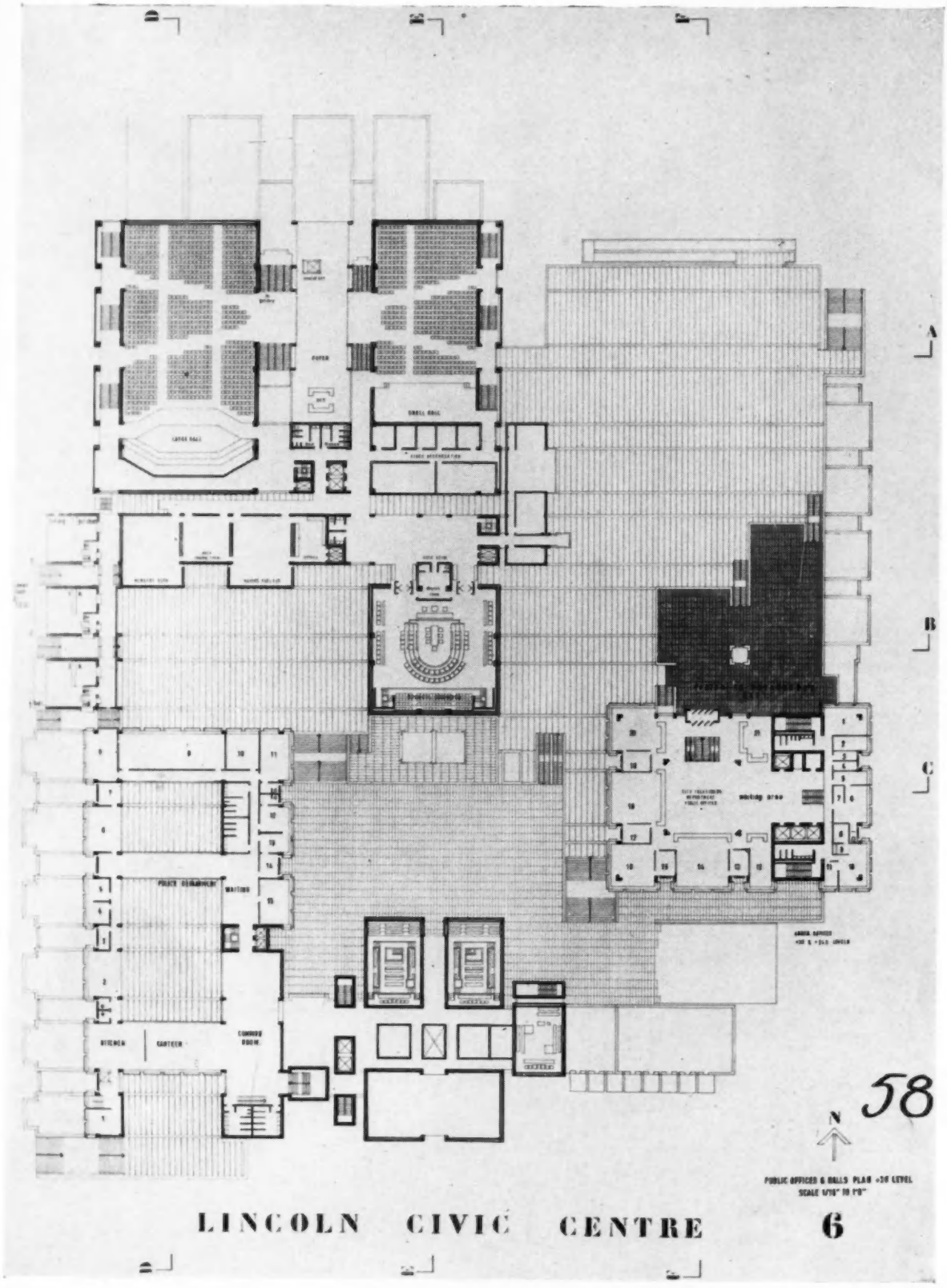
Civic Suite, Civic Halls, and Courts	
74,000 sq. ft. @ £6	£444,000
Administrative and Police Offices	
83,800 sq. ft. @ £3 10s. ...	£293,300
Extra over for Car Park	
28,000 sq. ft. @ 5s.	£7,000
Extra over for piazzi	
126,000 sq. ft. @ 4s.	£25,000
27 Shops @ £2,000 each ...	£54,000
TOTAL	£823,300
Piling, based on programme requirement of 20 ft. and 40 ft. piles	£150,000
TOTAL	£973,300
Proposed Bridges at, say, £15,000 each	£30,000
TOTAL	£1,003,300



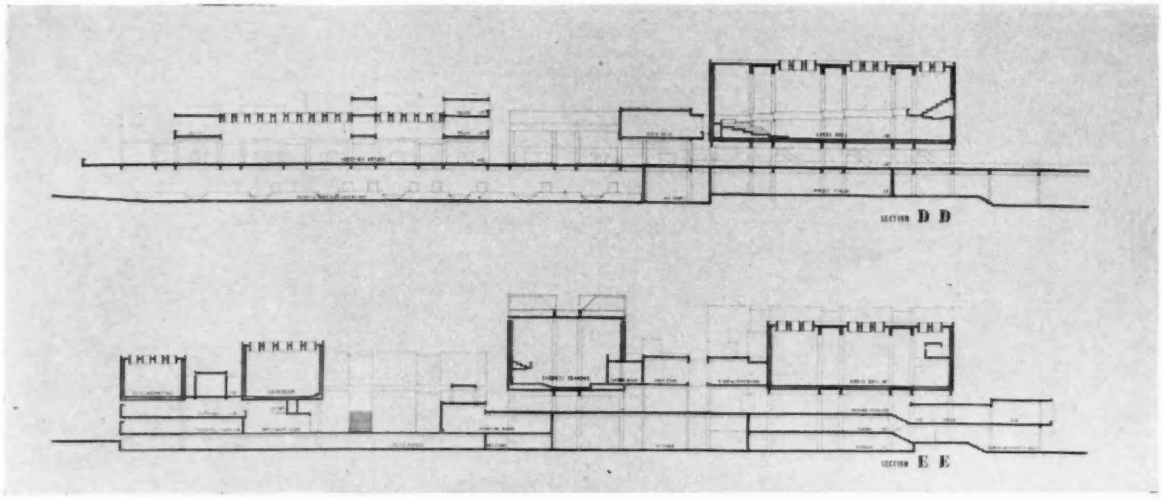
crush hall, +13 level

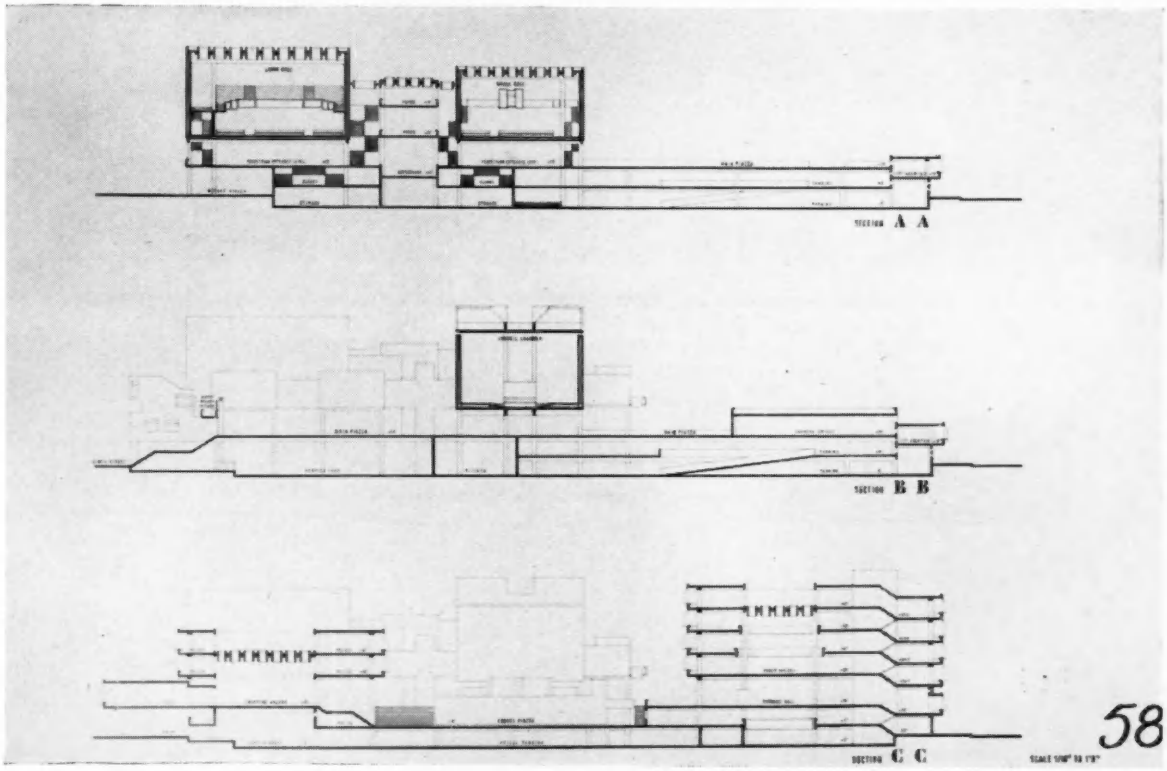


winning design, main piazza, +15 level



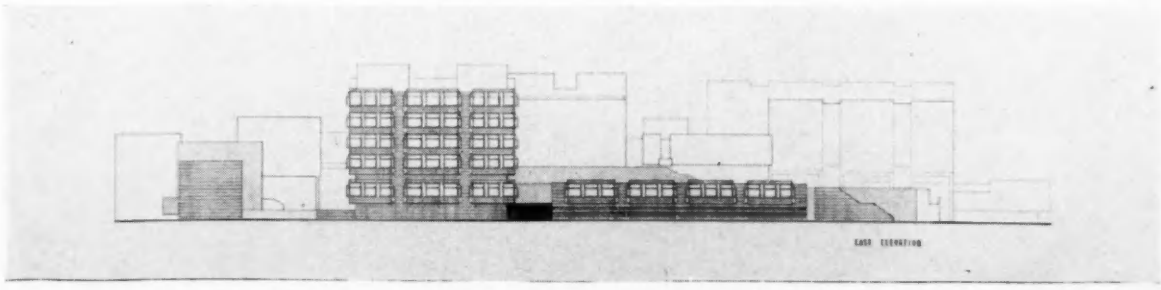
winning design, public offices and halls, +30 level



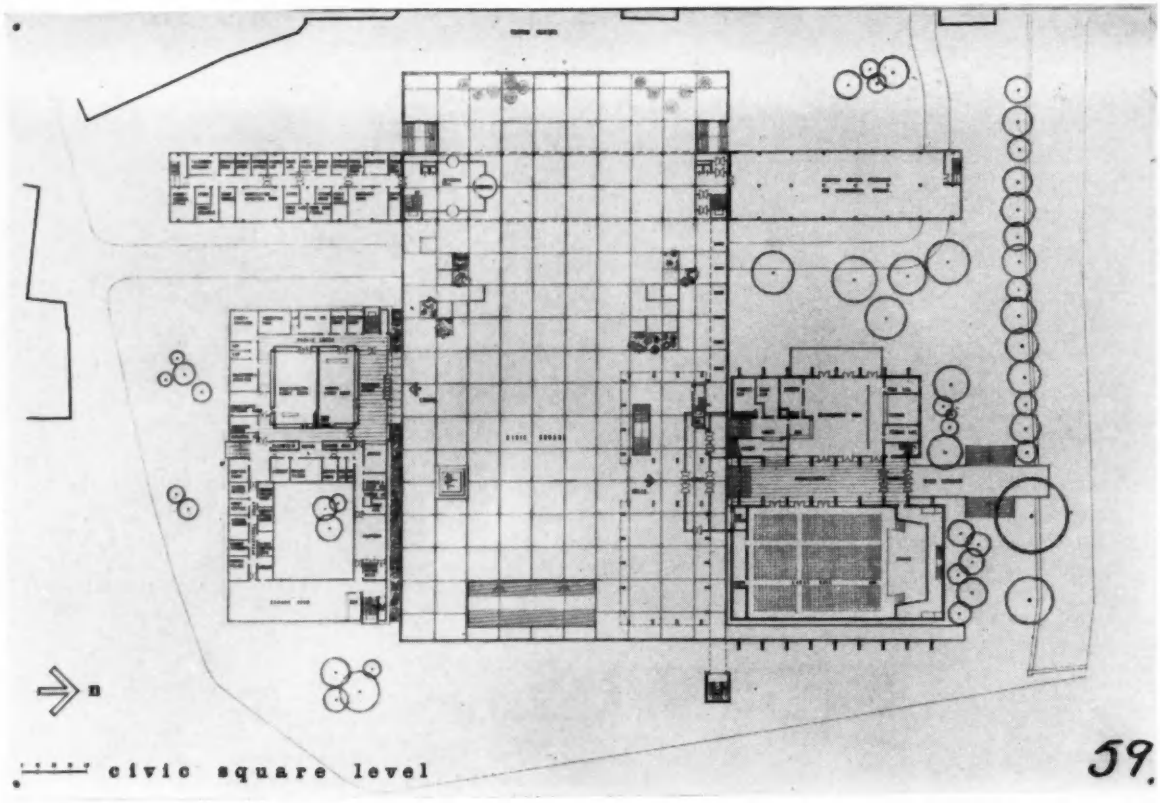


sections

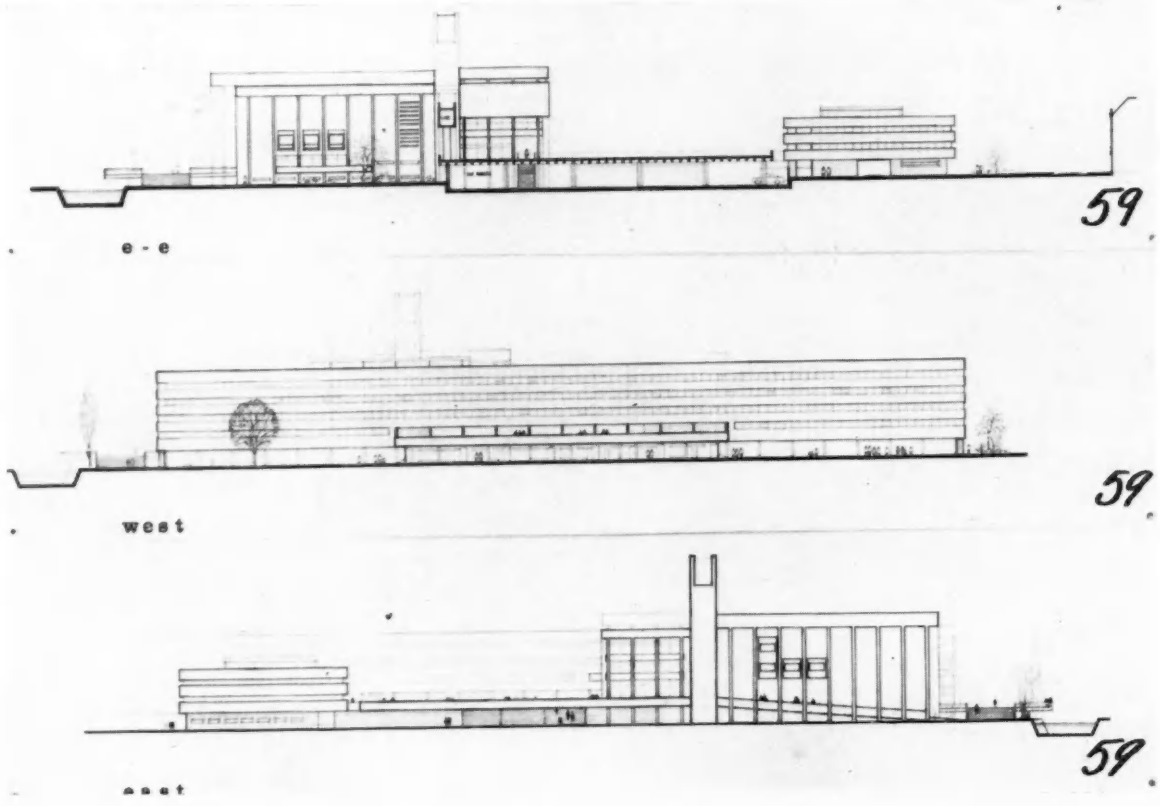
WINNING DESIGN: DENIS GAILEY, ARIBA, AND ELDRED EVANS, AA DIPL, architects

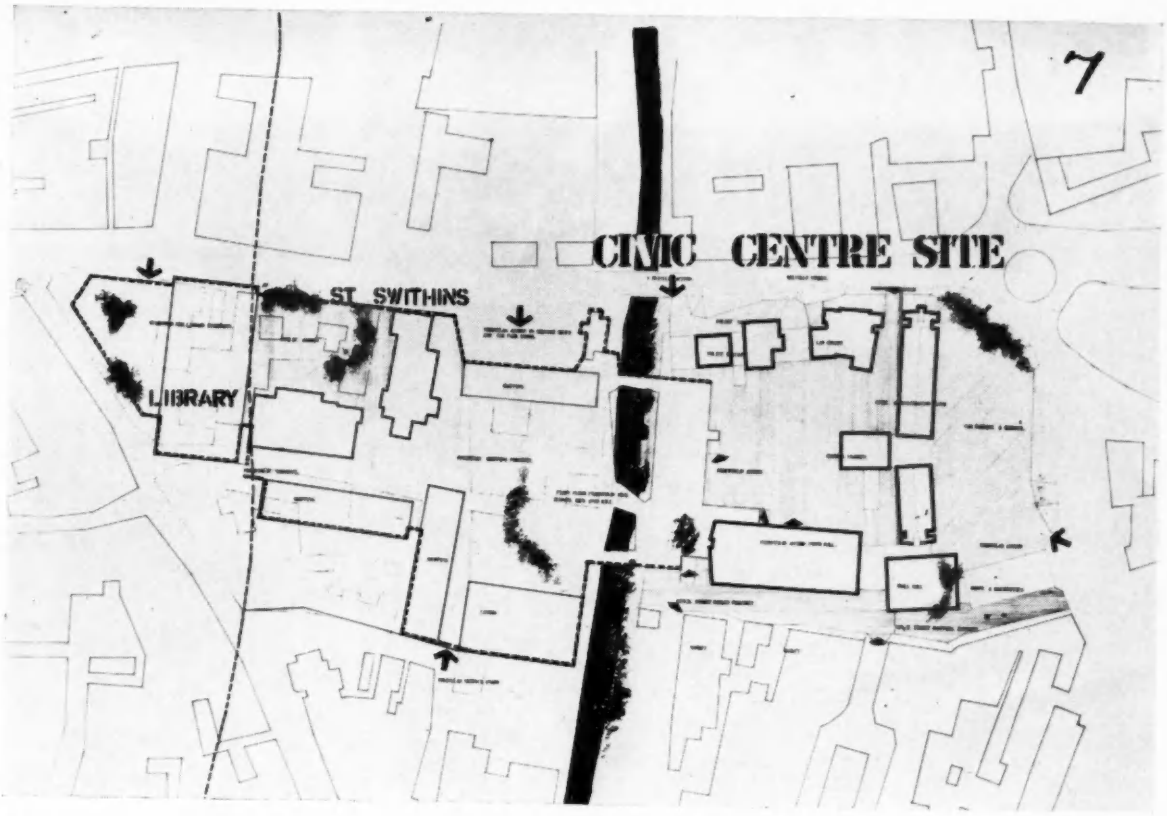


east elevation

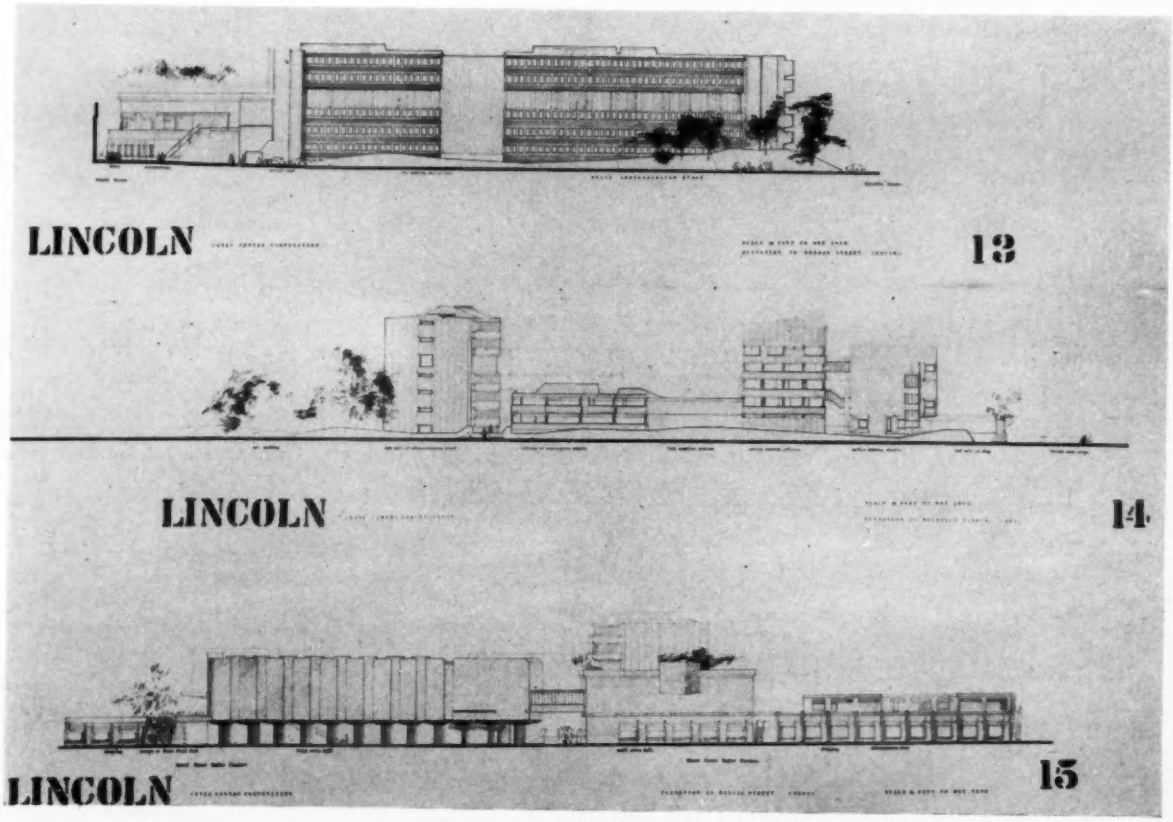


EQUAL SECOND: ANDREW RENTON, PETER HOWARD, JOHN KENNETT & GERALD LEVIN

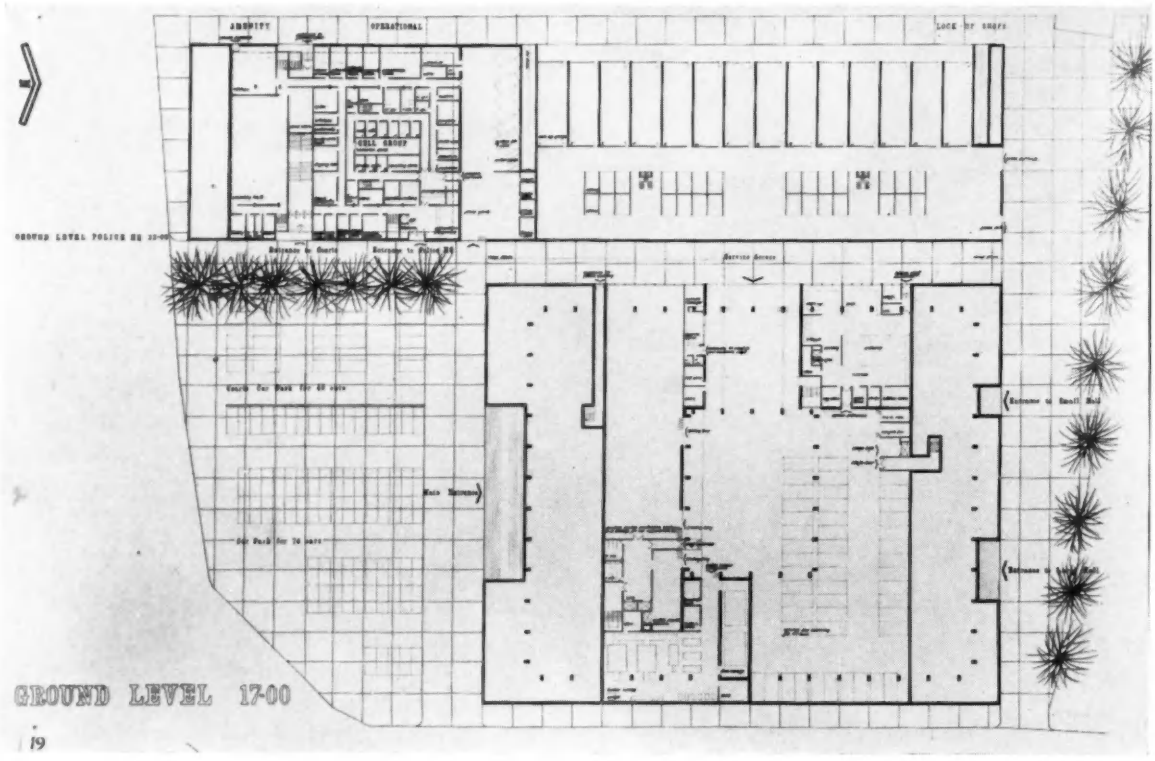




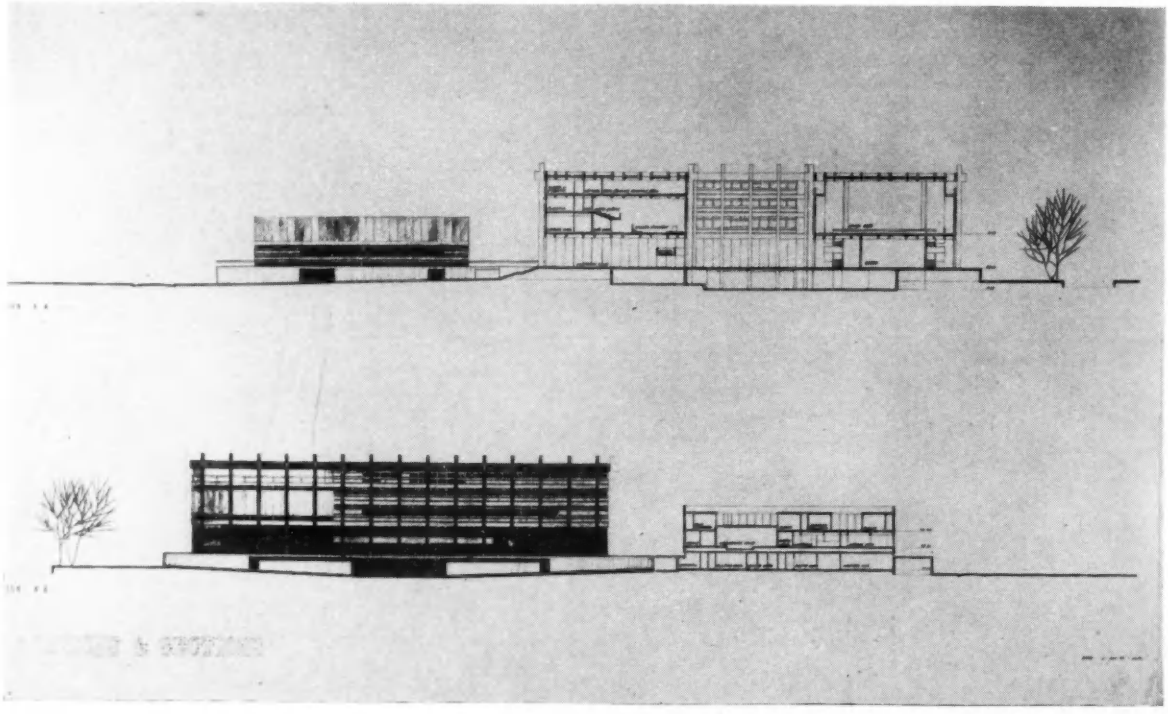
EQUAL SECOND: JAMES BOURNE, DAVID BUTTON, STEPHEN OSGOOD & H. WERNER ROSENTHAL



Lincoln Civic Centre



EQUAL SECOND: FRANK GOLLINS, JAMES MELVIN & EDMUND WARD



Competition News

Liverpool University Halls of Residence

THE UNIVERSITY OF LIVERPOOL invites architects (as stated in 'The Builder' of September 22) to submit designs in competition for a group of students' halls of residence and other buildings on the Carnatic Site at Mossley Hill, about three miles from the centre of Liverpool. The competition is open to all architects on the British Register, which includes a number who are in practice abroad.

The assessors for the competition are Sir James Mountford, MA, DLitt, Vice-Chancellor of the University; Mr. Donald Gibson, CBE, MA, FRIBA, Director-General of Works at the War Office; and Professor Myles Wright, MA, FRIBA, MTPI, Professor of Civic Design and Planning Consultant to the University. Mr. R. Allen, FRICS, has been appointed to advise on cost matters.

The site has an area of 24 acres with views over the Mersey to the Welsh mountains; it contains many fine trees. Accommodation is required for 1,100-1,200 students, both men and women in 5 or 6 halls. About one-third of the resident students will be women. The cost of the works will be approximately £1,500,000.

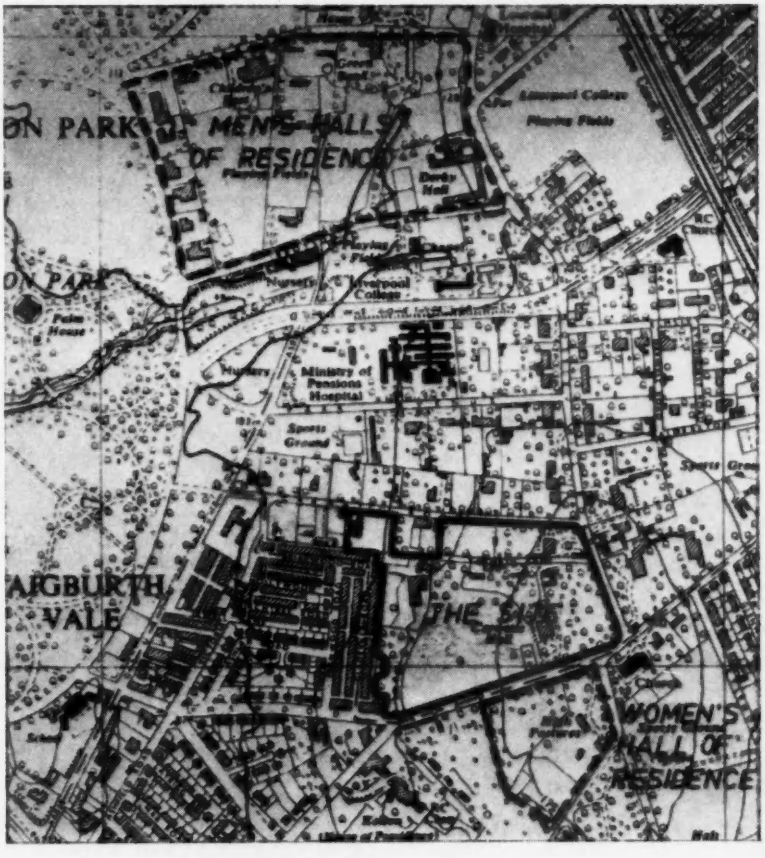
This is the first time the University has sought to provide residence for both men and women students within a single unified building project. Although the students will sleep and study in separate 'halls'—which may be of any architectural form—they will all have meals in the same central group of buildings. It is intended that a number of other buildings and activities will be shared by all students. These include a library and reading room, a small group of shops, coffee bar and post office, squash courts and other recreational facilities. Houses and flats are to be provided for married academic and administrative staff and perhaps for some graduate students. The layout of the various buildings, convenient access for vehicles and pedestrians, and landscape design are problems specially drawn to competitors' attention

The premiums offered are £5,000, £3,000 and £1,000. The assessors may also award, if they see fit, a further £2,000 in individual sums not greater than £500 for designs of merit other than those placed 1, 2 and 3.

An unusual feature of the competition is that competitors are given guidance on total cost and price per sq. ft., based on the prices ruling in Liverpool in July this year. It is hoped that this will help competitors to strike a fair balance between amount of accommodation and the quality of materials and finishes. The guidance given is also intended to ensure that competitors conform to the rules concerning cost laid down by the University Grants Committee for residential buildings for universities.

Designs are to be submitted by September 4, 1962, and the last day for questions is January 1, 1962. It is intended to announce the award on October 1, 1962, and that building of the winning scheme should begin in March, 1964. Conditions of the competition may be obtained from the Registrar, The University of Liverpool, Liverpool, 3, on deposit of £3.

Points from the conditions are: Students shall be accommodated in either 5 or 6 halls of residence, no hall containing fewer than 100 nor more than 250. The halls may be designed in any form competitors like, subject to the cost limits. 'The University would welcome some diversity of form, including height,



COMPETITION FOR HALLS OF RESIDENCE, LIVERPOOL UNIVERSITY. *Above is an aerial view of the site, looking NW. Below: Site plan (Scale 6 ins. to 1 mile)*

but it does not desire that all the halls should be in the form of tall buildings.' Within each hall there should be some variety in the shape and size of study-bedrooms. The accommodation within a hall may, and in at least some halls should, be subdivided so as to give added privacy to groups of students' rooms and to encourage better acquaintance between smaller groups of students. Competitors should keep constantly in mind the need to reduce the transmission of noise. The competition will be assessed on the basis of building costs ruling in Liverpool in July, 1961. The winning scheme must be capable of construction for a total cost obtained by multiplying the number of study-bedrooms provided by £1,300, exclusive of furniture, fees and 'abnormal costs' that could not have been foreseen.

New County Offices, Berkshire

BERKSHIRE COUNTY COUNCIL has now revised the Conditions of its open competition for architects for the design of new county offices and a new council chamber to be erected on a site adjacent to the present Shire Hall, Reading. The revised estimated cost is £1,022,000. Premiums of £3,000, £2,000 and £1,000 will be awarded to the competitors placed first, second and third respectively. As mentioned in the original announcement (reported in 'The Builder' of March 10), Mr. Frederick Gibberd, CBE, FRIBA, MTPI, FILA, has been appointed assessor.

Those intending competitors who have already registered their names with the council and paid the deposit will receive the competition documents automatically. New competitors may obtain copies of the Conditions and schedules of accommodation from the Clerk of the County Council, Shire Hall, Reading, during the period October 2 to November 13, 1961, on receipt of a deposit of £2 2s. The latest date for submission of questions is January 22, 1962, and entries must be submitted by 5.30 pm on Tuesday, June 5, 1962.

Professional Announcements

MESSRS. J. D. & B. Y. TETLOW, chartered architects and planning consultants, have been joined in partnership by MR. JOHN MYTTON, ARIBA, and have moved their offices to 32 & 34 St. John-street, Lichfield (tel.: 2443 & 3686).

MR. GEORGE LEWIS EDWARDS, ARIBA, has now taken up his appointment as county architect to Radnorshire County Council, County Hall, Llandrindod Wells, and would be pleased to receive trade catalogues and technical literature.

MESSRS. STONER & SONS, quantity surveyors, announce that they are closing their offices at 260/262 Bank-chambers, 329 High Holborn, London, WC1, today, September 29, and that their practice will be conducted from their offices at 125 Newland-st., Witham, Essex (tel.: Witham 2045).

MESSRS. J. SEYMOUR HARRIS & PARTNERS have opened a branch quantity surveying office at 188 West Regent-street, Glasgow, C2, under the joint management of MR. J. D. EMMERSON, ARICS, and MR. J. E. A. ALLEN, ARICS.

News of the Week

South Bank Developments

MR HENRY BROOKE, the Minister of Housing and Local Government, has had informal talks with Sir Isaac Hayward, the leader of the London County Council, on the future progress of the £3,704,000 South Bank cultural centre scheme. Work was expected to begin this year. It was stated that trial borings had been made and other preliminary work was either under way or the subject of a contract. The scheme includes a new front for the Festival Hall, a 1,100-seat concert hall, and a series of art and exhibition galleries and open-air sculpture courts.

Scale of Professional Charges

THE new quantity surveyors' scale of charges is available and became effective on July 1 last. This document contains the latest architectural scale, effective from August 1, 1960, surveying services, effective from August 1, 1958, and the qs scale. Copies are available from the Secretary, Faculty of Architects and Surveyors, 68 Gloucester-place, London, W1.

TPI Gold Medal Award

THE GOLD MEDAL of the Town Planning Institute is to be presented to Sir William Holford, MA, PRIBA, past president of the Institute, at Carpenters Hall, London, EC2, on October 4. The medal is awarded for outstanding achievement in the field of town and country planning, and is international. Previous awards were made to Sir George Pepler in 1953, Professor Sir Patrick Abercrombie in 1955, and Mr. Lewis Mumford in 1957.

The president of the Institute, Mr. Rowland Nicholas, CBE, MICE, will present the medal. Sir William's sponsors will be Professor J. S. Allen, FRIBA, PPTPI, Mr. Desmond Heap, PPTPI, and Mr. L. W. Lane, ARICS, MTPI.

ABS Ball

THE MANCHESTER SOCIETY OF ARCHITECTS is organising an Architects' Benevolent Society ball to be held at the Mere Golf and Country Club, Cheshire, on November 2. Further details from Mr. Denis Bowman, ARIBA, at 61, Queens-road, Oldham, Lancashire. Tickets will be 2 guineas each.

A Hundred Years Ago

From The Builder of Sept. 28, 1861

MASTERS AND MEN.—Sir, At the last meeting of the London Master Builders' Society, the secretary (Mr. Wailes) mentioned that he had received letters from leading firms in different parts of the country, urging that a general association of master builders throughout England should be formed for the purpose of coming to an agreement as to reckoning wages by the hour. In London the system may now be said to be firmly established, as also (I believe) in Edinburgh. Let the country masters, therefore, generally, express their wishes before the next monthly meeting of the London Builders, which will be in about a fortnight's time, and an end will be put to the arbitrary dictation of the Masons' Society, who I see have gone so far in Liverpool as to impose a fine of £20 on a master, as a condition of his being allowed to resume work! The journeymen masons are united throughout England. Why not the masters? It is the only way for us to keep the control of our business. A LONDON BUILDER.

Coming Events

MONDAY, OCTOBER 2

MANCHESTER BUILDING CENTRE. — Exhibition: 'Architecture of Technology.' 115 Portland-st., Manchester 1 (until Oct. 14).

LMBA (NE AREA).—Annual ladies' festival. Dorchester Hotel, W1. 7.30 p.m. (carriages 1 p.m.).

TUESDAY, OCTOBER 3

OFFICE APPLIANCE & BUSINESS EQUIPMENT TRADES ASSN.—49th Business Efficiency Exhibition. Grand Hall, Olympia. 10.30 a.m. to 7 p.m. (until Oct. 11)

GAUGE AND TOOL MAKERS' ASSOCIATION—Trade luncheon. Guest of honour, Mr. Edward Heath, Lord Privy Seal. Savoy Hotel, WC2. 1 p.m.

INSTITUTION OF CIVIL ENGINEERS.—'Three Prestressed Concrete Railway Bridges,' by Mr. F. Turton. Gt. George-st., SW1. 5.30 p.m.

INSTITUTE OF BUILDERS (MIDLANDS BRANCH).—'Contract Planning in the Building Industry,' by Mr. E. W. Spencer. Windsor Room, The Grand Hotel, Birmingham 3. 7 p.m.

WEDNESDAY, OCTOBER 4

TOWN PLANNING INSTITUTE.—Presentation of TPI Gold Medal to Sir William Holford, PRIBA. Carpenters Hall, Throgmorton-ave., London, EC2. 6 p.m.

VICTORIA & ALBERT MUSEUM.—'Sculpture and Modelling in Victorian Architecture—11,' by Mr. C. Handley-Read. Lecture Theatre, SW7. 6.15 p.m.

ARCHITECTURAL ASSOCIATION.—Illustrated talk on Swedish Housing Development Since 1955, by H. E. Senkowsky, 34 Bedford-sq., WC1. 6.15 p.m.

INSTITUTE OF QUANTITY SURVEYORS (SOUTH EAST BRANCH).—'The Icos-Veder System'—a talk with film on the Hyde Park scheme by Prof. Dr. C. Veder, or his English representative, of the Impresa di Costruzioni Opere Specializzate. Brighton Technical College. 7.30 p.m.

THURSDAY, OCTOBER 5

INSTITUTION OF MUNICIPAL ENGINEERS.—One-day convention: 'Planning for Traffic.' Central Hall, Westminster, SW1. 9.30 a.m.

INSTITUTION OF ELECTRICAL ENGINEERS.—Presidential address by Mr. G. S. C. Lucas. Savoy-pl., WC2. 5.30 p.m.

INSTITUTION OF STRUCTURAL ENGINEERS.—Presidential address by Mr. F. R. Bullen. 11 Upper Belgrave-st., SW1. 6 p.m.

SOCIETY OF BUILDING AND CIVIL ENGINEERING STUDENTS.—Inaugural lecture: 'The Building Industry and Its Leadership,' by Mr. D. E. Woodbine Parish. Burton-st., Nottingham.

FRIDAY, OCTOBER 6

INSTITUTE OF ADVANCED ARCHITECTURAL STUDIES.—Course on Colour in Architecture. Micklegate, York. 4.45 p.m. (until Oct. 10).

ART WORKERS GUILD.—'Stable Standards and Fleeting Fashion,' an illustrated discussion between Mr. Peter Clarke and Prof. Nikolaus Pevsner. 6 Queen-sq., WC1. 7 p.m.

Letters to the Editor

Professors and Private Practice ; Suburban Redevelopment ; Manufacturers and Firm Prices

SIR,—I feel sure that many of your architect readers will agree that you have rendered a distinct service to their profession and to architectural students in particular by drawing attention, as 'Peterborough' of the 'Daily Telegraph' has also done, to the scale of the private practices that some of the Professors of Architecture have built up during the last few years, to say nothing of the many unremunerated appointments to public bodies that they have accepted.

One can seldom open an architectural or building journal nowadays without reading that a Professor of Architecture, either in this country, Scotland or the Commonwealth, has been given a huge job or group of jobs (some of which often necessitate travelling to the other side of the globe), been made a President of a Society, a member of a Commission or a Council, or become an adviser to some Authority or other.

One should appreciate that these whole-time Professors may draw permanent salaries in the range of £4,000 p.a. and upwards, together with other advantages, and that permission to run private practices is given to enable them only to keep in touch with the practical side of the profession.

Is it not a reasonable conclusion that the results of all these commitments must inevitably be at the expense of professional, scholastic and educational obligations ? One may well wonder how long those in authority at the Universities, and others, are going to tolerate this state of affairs.

SIDNEY LOWETH [FSA, FRIBA],
2 Balfour-court, Folkestone.

SIR,—May I suggest that the apprehensions of 'Peterborough,' of the 'Daily Telegraph,' about the extra-mural activities of professors of architecture, on which you commented last week, should not be taken too seriously? It is not so long ago that the complaint was about so many teachers of architecture being out of touch with professional practice ; now that we have a number of distinguished and highly successful architects as professors that, too, seems to be a matter for concern.

As you suggest in your note, success in architecture and planning, as in other walks of life, brings its own peculiar problems, the most harassing of which is apportionment of time. I do not think that a professor of architecture with a large practice should be expected to devote a lot of his time to routine teaching. His chief task is to see that the curriculum is on the right lines and that his teaching staff are competent and trustworthy. The most successful professors of architecture, I believe, have been those whose chief asset was the ability to fire the enthusiasm of the students in an occasional lecture.

If we want first-class men as leaders of architectural education, we must, I think, be prepared to allow them all the time they reasonably need for their private practices. As to large practices, is it not a fact that beyond a certain point, owing to high taxation, the rewards are no longer attractive?

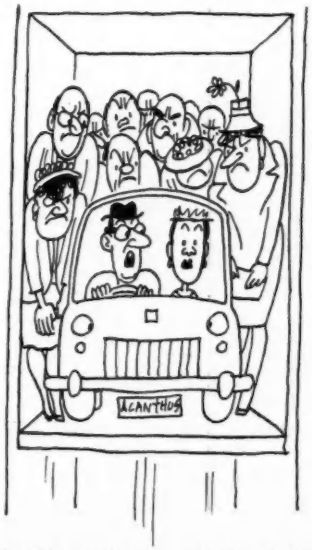
G. J. HOWLING [HON. ARIBA],
Wimbledon, SW19.

Suburban Redevelopment

SIR,—A few weeks ago you were good enough to publish a letter from me on the above subject. Since then I note from Press reports that Mr. Eric Lyons has lectured on this subject to the Town and Country Planning Summer School (I do not suggest that this is cause and effect!), making out a strong case for group housing. From my own limited observations I feel sure he is on the right lines.

Most low-cost speculative suburban development, particularly that of the Victorian and Edwardian eras, is on the grid-iron plan, with all the house fronts facing corridor roads and having fairly large back gardens, a most wasteful form of planning, especially when the houses are semi-detached. Most of these roads go unused from one week's end to another except by tradesmen's delivery vans and for parking cars. I suggest that where large areas of obsolescent property are due for redevelopment many of these roads could be abolished and the land used for building and landscape treatment.

Yet what do we find? Generally the old road system and building lines are retained and redevelopment is mostly on the one-small-plot basis. I am thinking at the moment of a suburban road in which a number of fairly large Victorian houses are being pulled down and their sites separately redeveloped for flats. Each conforms to the old building line, each has its own separate garage accommodation and access road and each its concreted back garden from which almost all trace of vegetation has been removed. If these sites were to be combined, two or three of the access roads could be dispensed with, and by more compact planning there could also be some economy in the space allotted to garages and hard standings. In fact, it would be possible to have a really attractive group scheme, planned and landscaped on the lines suggested by Mr. Lyons.



'I told you it was a block of flats and not a public garage!'

I feel that golden opportunities for improving suburbia are being lost, owing to piecemeal redevelopment. We hear much of consortia nowadays. Should it not be possible for some of the small firms of developers who engage in this type of work to get together and acquire larger sites for redevelopment ? I do not underrate the difficulties involved either for the developers or for local authorities who wish to close roads, but for the sake of better urban living conditions these ought to be overcome. Should there not be a lead in this matter from the MoH and LG ?

SUBURBANITE.

Manufacturers and Firm Prices

SIR,—Let us hope the President of the Midland Federation of Building Trades Employers was not flogging a dead horse when, in speaking at the Derby & District Association of Building Trade Employers ('The Builder' of September 22, p. 542), he ventilated what I believe to be a thoroughly justified complaint at the inability—or is it unwillingness?—of manufacturers and merchants to adhere to firm prices for the longer contract periods.

Of course manufacturers and merchants have to face the problems of rising costs in raw materials and wages, but why is the builder with similar problems —many less capable of control—expected to shoulder some, if not all, of *their* risks as well as his own? Surely an equitable prerequisite of demanding firm prices from builders should be an assurance that the heavy material content in the make-up of his tender should not be subject to variation as a result of factors outside his control.

If the producer of materials is faced with rising costs, some as a result of Government policy, is his position different from that of the builder who also has to cope with increased labour rates, heavier transport charges, etc., or is the nub of the thing that builders are genuinely trying to make the firm price contract work, whilst suppliers of materials have not yet been persuaded or coaxed into doing so because the element of competitive pricing is not so strong in their field as it is in contracting?

N. PEARSON, Managing Director,
Kleine Reinforced Concrete, Limited,
9-13 George-street, W1.

Landscape Architect Appointment, Herts

HERTS COUNTY COUNCIL are to appoint a landscape architect who will be responsible for maintaining rural amenities in areas where there is rapid building development.

Schools' Teaching Swimming Ponds

Basic Facilities and Capital Costs

BY T. EDWIN BELT & JOHN SMITH, FRIBA

IN THE INTERESTS of schools' life-saving teaching swimming instruction, standardisation of the facilities provided is essential to the promotion of achievement standards beyond the parochial level.

The problem is closely concerned with sound economics in the form of minimal fully practicable design, and is related to the existing competition requirements, the physical characteristics of the pupils, and their mental approach to the subject; the last-mentioned was discussed in 'The Builder' of April 1, 1960, when the conclusion was reached that a constant shallow depth of water is the requirement for safe and expert schools' swimming instruction at all levels.

The accompanying diagram (Fig. 1) and chart give facts and figures which have been applied and which are applicable to the six sketch plans illustrated (Figs. 2-7).

In furtherance of the recommendations of the Wolfenden Committee on Sport, schools' use of public baths establishments, or public use of school ponds will be envisaged whenever practicable. There are approximately 48,500 schools and departments in England and Wales, and although it is desirable that each should be provided with teaching swimming facilities on the premises, the reality must be related to the capital expenditure reasonably to be envisaged.

Ponds for Dual Use

The recommended standard size of pond for dual use is 82 ft. 6 in. x 28 ft. x 3 ft. deep. A pond provided on junior school premises for educational and public use can be 66 ft. x 24 ft. x 3 ft., when adult competitive swimming use is not anticipated, otherwise the width should be 28 ft.

A good case can be put forward for a pond to be provided on the premises of every Infant school, and such specialist facilities measuring 55 ft. x 20 ft. x 2 ft. 6 in. are not suitable for public use. The advantages of swimming instruction commenced in the Infant grade are many, and the provision of facilities for such teaching merits some close attention.

The provision of facilities solely for the Junior and for the Secondary school will be required when a public establishment is not conveniently available for educational purposes, but to which the public can reasonably be expected to travel.

The lengths of the ponds are related to the competitive swimming distance of 110 yards (an approximation of 100 metres) and also to the arms-span, finger tips to finger tips, of the respective grade of pupils. This last is a convenient distance apart of the pupils distributed along the rails down both sides of the pond for class instruction. The average measurement within each type of school is shown on Fig. 1. The numbers of pupils shown on the chart are derived from these figures.

Lane Widths

The lane widths of the ponds are derived from the same arms-span measurements and the competition provision of 7 ft. wide lanes for adults of average span 6 ft.; i.e. 6 in. clearance of the lane demarcation ropes on either side of the above-average swimmer. The usual four Houses within a school suggests pond widths of four lanes.

Heights of children are taken as varying 3 in. above and below the average. The water for instructional purposes should not be deeper than the height of the below-average child's shoulder height, as shown on Fig. 1. No purpose would be served by a depth in excess of 3 ft.,

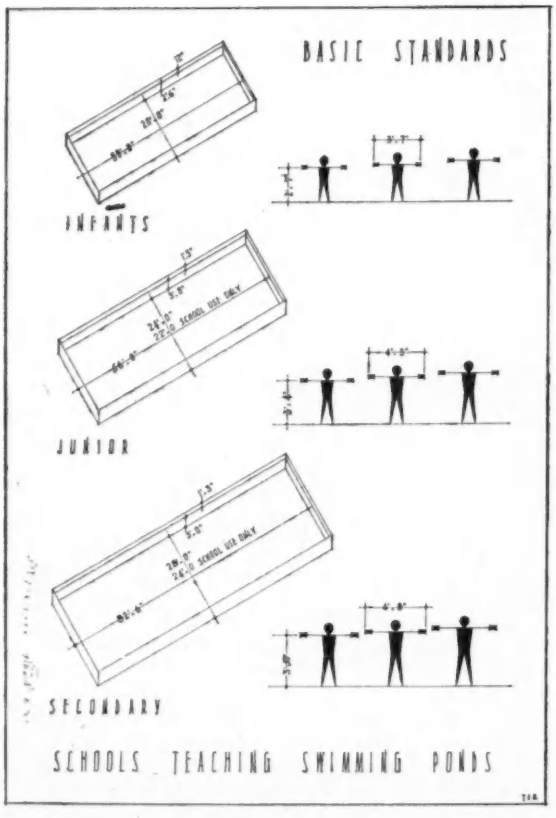


Fig. 1

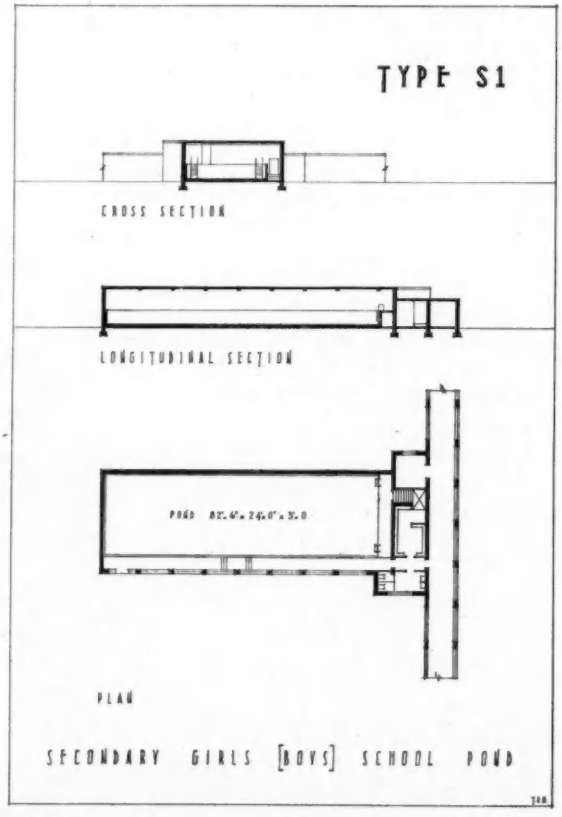


Fig. 2

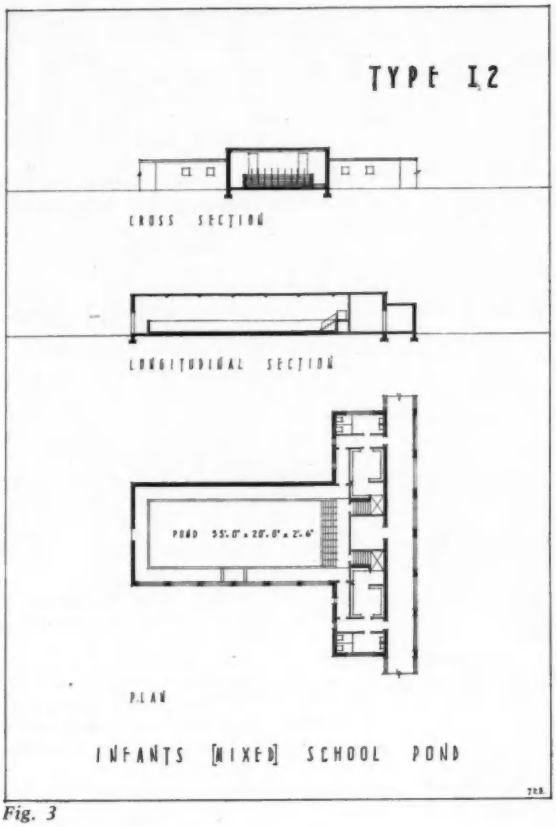


Fig. 3

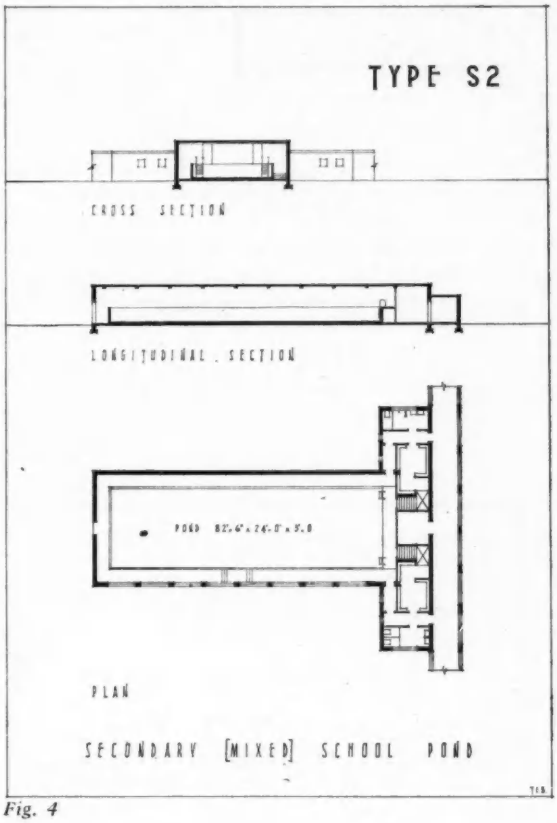


Fig. 4

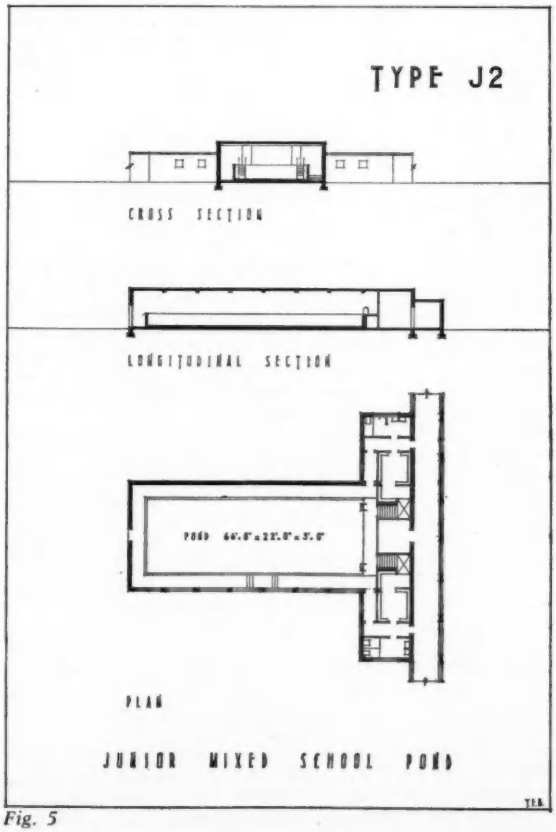


Fig. 5

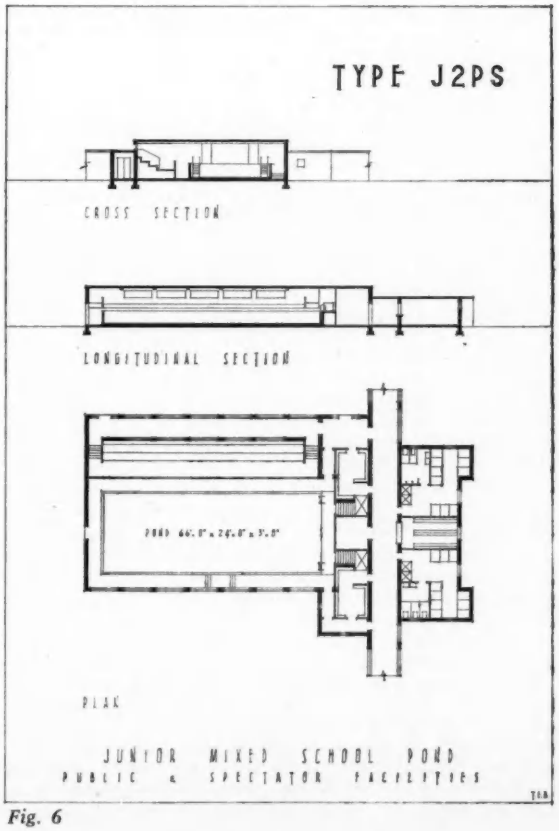


Fig. 6

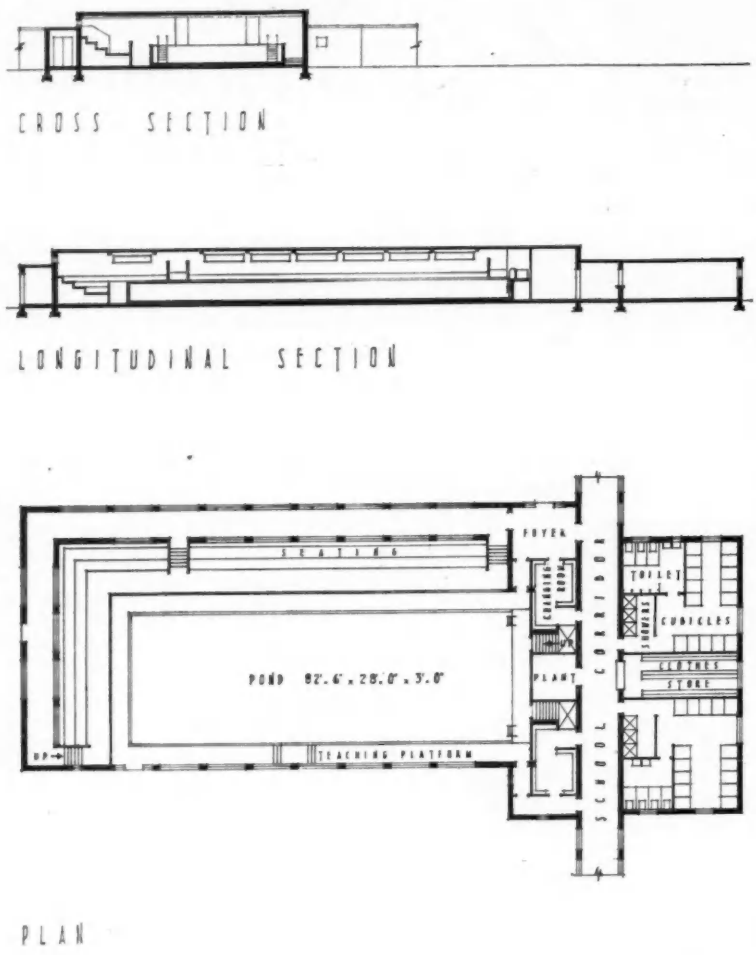


Fig. 7.—Type S2PS Secondary [Mixed] School Pond with Spectator Facilities

and unwarranted expense is to be avoided. The two Olympic baths in this country entail a race-starting plunge into 3 ft. of water, and this depth is fully adequate for all swimming actions. The depth must be reduced to 2 ft. 6 in. for infants, and steps across the full width of the pond will be instructionally advantageous for this class of user. It will be noted that the effective competition length of the pond should not be affected by the intrusion of the steps; treads at and above the water level will be in excess of this length measurement.

Limit of Cost Contingency

When it is intended to substitute a pond for a gymnasium proposal in a new school, the limit of cost contingency arises. A school gymnasium may be taken as costing £4 5s. per foot superficial overall, for comparison purposes.

The orthodox type of swimming bath, incorporating shallow and deep ends with a diving stage, which is dangerous in use and unsuitable for schools swimming purposes, is estimated to cost £6 15s. per foot superficial overall. It is the constant duty and endeavour of education architects to provide schools free from the danger of accidents to pupils, and experience has shown that any hazard inadvertently included will not remain for long without a practical demonstration of its potentialities.

Inexpensive Construction

The ponds shown on the drawings are 6 in. thick vibrated reinforced concrete free-standing tanks in halls 11 ft. 6 in. high. This is an inexpensive and otherwise favourable form of construction. It is structurally obvious that the lesson is to take place in the water; the only other space available to the pupils is the starting platform, which is approached from run-through showers and a foot-bath. The area to be kept hygienically clean is reduced to the minimum. The teacher proceeds direct to his teaching platform in outdoor footwear, where the efficient teacher will remain throughout the lesson, so inspiring the confidence which a certain knowledge of his position gives to the pupils. Here he directs the lesson from a comfortable position 3 ft. below the pond surround, without any necessity for tiring stooping or crouching down. The chalkboard is behind him.

Bench seats in the changing rooms are teak, 11 in. wide, with 6 in. deep baskets beneath, fixed 18 in., 15 in. and 12 in. high for Secondary, Juniors and Infants use respectively. Clothes hooks are 12 in. apart, fixed 5 ft., 4 ft. 6 in. and 3 ft. 9 in. high.

The roof is channel reinforced wood wool slabs, rendered on wire mesh, finished with 3-ply bituminous felt with a mineral grit finish, under which is a suspended asbestos ceiling in an aluminium grid. External walls are cavity construction, finished internally with foamed plaster and tiles to door height.

The scheduled volume of water in each case can be dealt with adequately by means of a 'packaged' type plant consisting of filtration, aeration, sterilisation and electrical heating units, maintaining a turnover period of three hours and a water temperature of 75 deg. F.

Avoiding Condensation

The pond hall must be kept at a temperature of 78 deg. F. to obviate condensation. Input warm air fans and radiant panels will supplement the school's general temperature level of 62 deg. F. The school corridor will be maintained at 55 deg. F., and doors with automatic closers are a not unimportant provision if condensation in the pond hall is to be avoided.

The water enters the pond from a central distribution channel built at the bottom of the full length, thereby setting up convection currents toward each side, whence it is withdrawn through the 2 in. c.p. rails running down the length and just under water level. The water inlets to the rail are arranged as spitoons at each fixing to the wall.

Eliminating Expensive Details

It will be noted that expensive details such as the scum trough, non-slip edging, and the non-slip surround for bathers have been eliminated from this pond except for the short starting platform, where the two last-named are incorporated but not a scum trough. It is difficult to induce schoolchildren to walk when their natural inclination is to run, and minor accidents occur in such circumstances, which are best avoided on school premises.

It is essential for teaching purposes that a rail shall be provided below water level, so enabling the pupils to float out on the surface of the water with the arms in the correct position below the water. A scum trough cannot fulfil this requirement, and additionally will not permit an undergrip or a toe grip, both of which are useful in teaching.

Four ropes, to be hooked on to the rails, are available for flotation exercises. Plastic coil and float lane demarcation lines have fixings to the end walls of the pond. The centre of these lanes is marked on the floor with a line 3 in. wide terminating 4 ft. from each end, to assist chain swimming within each lane. Training boards are supplied, and five bamboo poles, of which one is for the

bathside use of the teacher. Teak entrance steps are covered with fibre matting.

Spectator accommodation shown is for 1- and 2-form entry schools respectively.

'It is accepted without question that every new school shall be provided with a gymnasium. Expert physical education opinion is equally unanimous as to the favourable relative health-promotion value of aquatics to gymnastics. The life-saving advantage of swimming activities needs no stressing. The logical outcome in building terms is obvious, but implementation in the form of additional ponds rather than in the more traditional type of facilities for physical recreation is slow to mature into wholehearted acceptance of the facts of the case.'

The above is a quotation from information submitted by the authors in April, 1960, to an education authority, and now when more than one gymnasium forms a part of a new school proposal, then aquatic facilities can be considered as an alternative to one of those gymnasia.

CHART

Type of Pond	S2PS	S2	S1	J2PS	J2	I2
Size (water)	82 ft. 6 in. × 28 ft. × 3 ft.	82 ft. 6 in. × 24 ft. × 3 ft.	82 ft. 6 in. × 24 ft. × 3 ft.	66 ft. × 24 ft. × 3 ft.	66 ft. × 22 ft. × 3 ft.	55ft. × 20ft. × 2 ft. 6 in.
Cost at £5 per ft. sup. overall	£40,500 £38,500*	£19,400	£14,900	£27,100 £25,730*	£16,100	£14,000
Cost at 6s. per ft. cu.	£37,500	£19,100	£15,100	£25,600	£15,800	£13,800
Cost per ft. sup. water area	£16 9s. 0d.	£9 14s. 6d.	£7 11s. 6d.	£10 12s. 5d.	£10 19s. 8d.	£12 12s. 9d.
Number of pupils	35	35	35	31	31	30
Lengths per 100 metres	4	4	4	5	5	6
Lane width	7 ft. 0 in.	6 ft. 0 in.	6 ft. 0 in.	6 ft. 0 in.	5 ft. 6 in.	5 ft. 0 in.
Number of bathers	230			150		
Number of spectators : Seated	300			150		
Standing	—	140	—	40	120	100
Volume of water	43,312 gals.	37,125 gals.	37,125 gals.	29,700 gals.	27,225 gals.	17,187 gals.
Number of cubicles	30	—	—	20	—	—
Number of showers	6	—	—	4	—	—
Number of washbasins	4	4	4	4	4	4
Female W.C's	4	2	2	3	2	2
Male W.C's	3	1	1	2	1	2
Urinals	4	2	2	3	2	—

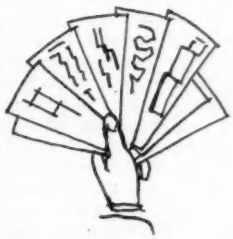
* Cost at £4 15s. per ft. sup. overall.

More Everyday Things

BY ARTHUR W. KENYON, CBE, FRIBA

61. The Old Order Changeth

EVERY SO OFTEN the young shock me; and when I am shocked I am twice shocked—first by the shock, and then by the discovery that I still can be shocked. It happened again the other day; it is not a matter of morals, or loose living, or even outrageous design. I am case-hardened to all the more seasoned forms of shock transmission. It is when I suddenly encounter in a newly-trained architect a great area of total ignorance on forms of construction which were taught to me, with my A B C, that my world comes tottering. So shaken can I be on these occasions that for the moment all confidence goes and I cannot in that second believe that the young man is an architect at all. But Time, the great healer, restores my faith, and as I readjust once more to this world of new science and forgotten knowledge in which we build, I mentally register yet one more fact of the great new order.



The simple cause of my most recent call to reality was nothing more than a double hung wooden sash window which I had occasion to use in a building we were altering. The young assistant in his enthusiasm attempted to detail it, and the details passed out of the office, in the way details do, to the contractor and thence to the joiner's shop where the window was duly made to instructions. But it didn't work. Why? Because neither young architectural assistants, nor young joiners, understand the subtleties of sash windows any more. I just had not realised that such things are so seldom used these days, and you might just as well ask a young assistant to draw a classic moulding as detail a sash window. Neither can we any longer rely on the workshops to keep us right if our details are faulty, for they know no more than the draughtsman.

What about all the new materials that have to be detailed? How is that to be done? Either you must go back to the specialist for your details, or you must rely on the information supplied in catalogues and trade literature. I doubt if any of our young draughtsmen today have the knowledge of building materials that we had a generation ago; there are so many materials to know and they change so rapidly that the young architect is driven instead to become an expert in the classification of trade literature.

The result of all this is that our working drawings today bear little resemblance to the ones I knew. They are fast becoming no more than a scheme of references, I sometimes feel like asking if I may please have a little inset sketch to show me what the building will look like. Nevertheless, I am full of admiration for the skill and labour which produce these wonderfully complex documents, and still more for the foremen who have so readily adapted themselves to the new techniques and manage to erect buildings from them.

I have recovered from my shock and I am ready to face the future again—but I still feel a little wistful about those sash windows, and I wonder how many more of our details we are to hand over to the specialists before we finally embrace our new role as the experts in packaging that Professor Mumford has prophesied.

Books Received

**** *Books noted in these columns may be obtained on application to the Book Dept., 'The Builder,' 4 Catherine-street, Aldwych, WC2. Cash (to include 9d. postage on books to the value of 10s.; 1s. 6d. over 10s.) should accompany the order.*

DOCUMENTS OF MODERN ARCHITECTURE. Edited by Jürgen Joedicke. (London: Alec Tiranti Ltd.) Price 90s.

PRINCIPLES OF STRUCTURAL DESIGN. By Niels Lisborg. (London: B. T. Batsford Ltd.) Price 50s.

THE FRIENDS MEETING HOUSE. By Hubert Lidbetter. (York: William Sessions Ltd.—The Ebor Press.) Price 35s.

DESIGN AND CONSTRUCTION OF FOUNDATIONS. By G. P. Manning. (London: Concrete Publications Ltd.) Price 25s. post free.

ELECTRIC LIGHTING. 2nd Ed. By C. E. Gimson. (London: Cleaver-Hume Press Ltd.) Price 15s.

BUILDING MATHEMATICS. By C. W. Schofield. (London: Edward Arnold (Publisher) Ltd.) Price 15s.

EXHIBITIONS. By Klaus Franck. (London: Architectural Press). Price 73s. 6d.

ESTIMATING AND COST CONTROL. By James Nisbet. (London: B. T. Batsford Ltd.) Price 32s. 6d.

Problems of Urban Development

Interpreting Old Values of Urban Life

In his paper to the Town and Country Planning Summer School, held at Reading University from September 6 to 13 under the auspices of the Town Planning Institute, Mr. Eric Lyons, OBE, FRIBA, discussed the need to reinterpret the old values of urban life with particular reference to new housing. He was particularly outspoken against what he called 'the thin web of outmoded ideas, misguided legislation and downright prejudice that obscures our vision.' Extensive extracts from Mr. Lyons's paper are given below.

OUR TOWNS ARE CLOGGED by vast areas occupied by housing that cannot be classified as slum and yet provides out-of-date accommodation and degrading domestic environments. These are the 'twilight areas,' that grey, tired mess of 19th century houses where so many of us have to live or that must be crossed to reach the brighter newer mess of garden-city-type low-density sprawl that must be crossed to reach the fields with their hedgerows of cars carrying refugees to their dormitory villages or small towns, or to the sea, or anywhere away from the city. The escape routes become more tenuous and refuges beyond suburbia more difficult to find. We must return to the town and while in theory the expansion of cities can be stopped by planning legislation and a determined green belt policy, I do not think that in itself will be enough to reconcile many people to town living. We need new kinds of urban housing and we need to examine some of the old values of urban life and interpret them in qualities that are compatible with modern living conditions.

We have built over 3½m. new buildings since the war but few significantly new ideas have emerged. I am not only thinking of architectural design (which might even be a matter of taste) but the perpetuation of old concepts of unit planning and layout planning, also of construction and assembly techniques. The few cases that may come to your mind which appear to contradict this view are the well-known few and even they generally break new ground only in one or two aspects. When I look at the whole sad picture I am convinced that our housing design is not representative of our architectural or technological resources. Most housing design is outside the stream of modern architectural thought. When I moan about the state of housing, I am told (particularly by planning friends) that our architects are not good enough, but it is easy to criticise the competence of a profession.

I believe there are many reasons for the failure of our housing. All house design is bedevilled by prejudices and snobberies and atavistic influences. People live in houses and it seems that the longer they live in them, the more convinced they are about what shape they should be; in fact, few people learn anything much after a lifetime of living in a house except, perhaps, how to adapt themselves to an outmoded and basically inconvenient rigid arrangement of rooms, spaces, equipment and so on. (Even women, who allegedly spend so much time in the kitchen, are the most unreliable judges of how kitchens should work.)

The layman may have few views about the design of hospitals or schools or crematoria, but on housing he is on his own subject; it is the only branch of architecture he feels at home in, so to speak. Hence the growth of the housing lay-expert, who likes what he knows. We also have lay-experts on roads: this means anyone who drives a car. And you may have met lay-experts on planning: these are often busy shopkeepers who are able to give a lot of time to local political activity and are actually born with a flair for planning and architecture, with the benefit of not having any special training that might impair their judgment.

Obstacles to Progress

There are other obstacles to progress in domestic architecture. These are the building societies (lay-experts), who are mostly stubborn opponents of modern architecture or any design idiom that is outside the grand old traditional style of pre-war spec-building. We have building by-laws based on 19th century health myths, sternly administered for the public good and, it seems to me sometimes, administered with a most enthusiastic sternness when the aesthetics of a design are unfamiliar to the building inspector (a housing lay-expert). And, dare I add, we have the Planning Acts, which have failed to stop the appalling proliferation of spec-builders' horrors, but still manage to frustrate or damage a lot of good design that does not conform to a committee's taste, or a municipal engineer's taste or a planning officer's taste (or any combination of these). It is not surprising that our best architects do not give their best on housing, or that they do their best to escape and seek fulfilment in other fields of design, where they may be allowed to make more significant contributions.

Compare our post-war achievements in school design with those of housing. On the one hand, new thinking by educationists and architects has produced a generally high level of architecture and some of the most adventurous and successful buildings in the country, while housing, with a few notable and much photographed exceptions, has dragged along at a safe pedestrian level—not that safe and pedestrian are synonymous nowadays, particularly on housing estates where the pedestrian has generally the least consideration.

Before somebody shouts 'Radburn', and, I point out, this OK word is not the open sesame to OK housing, I had better return to the question of what I think is wrong with housing. It seems to me that we have around our necks two traditions. One is the suburban villas which, like the animals, come two by two; this is the spec-builders' tradition. The other is the cottage image (as represented in housing manuals) based on the architectural gentility of the garden city. These two traditions have come closer together in recent years by their desperate adoption of superficial contemporary-type tricks, such as neat panels of cedar boarding. But I say, a plague on both these lots of houses—they have nothing to contribute to our problem today and the days of the 'individual' house are numbered. The specially designed house cannot play any significant part in tomorrow's housing programme: the cost of 'one-off' building is two or three times that of group building and the scarcity and high cost of land will make this less and less attractive.

While I believe that we need to start again with our housing, I think we could do well to look back to the 18th century. Not to ape any mannerisms, because stylistically derived architecture cannot bridge the enormous gap between such different societies (and such attempts must fail, in spite of the erudite mumblings of a few neo-georgian ghosts) but we can look back to this great period of English domestic architecture and town-building and observe that the essential factor was the scale achieved by group-design. That is by the collection of houses into significant grouping to create urban scale.

Grouped Housing

Housing is most of a town; no house is an island. The Englishman's home is his castle (a legal freedom) but his house must be regarded as part of the town, of the group, of the community. We need grouped housing not only for the sense of community that is imparted, and for the economic and sensible use of land and good town planning; but also to enable the use of modern building techniques by repetitive design. Our lay-experts have got to be persuaded that repetition need not conjure up visions of dreary endless rows of dullness (although I would exchange some dullness for most of our spec-builders' opportunist contemporary-styled gimmicks) but let them look at the Georgian squares and streets of London with their repetitive urbanity.

Visual diversity should be sought not by colour variation on walls (and roofs!) but by varying spatial relationships and the changing scale of squares and courts and similar arrangements. Indeed, this is where there is need for the most serious study and experiment, because this aspect is more important to the creation of humane environment than is the detailed external design of buildings. What we should be seeking to produce is a vital 20th-century domestic landscape which would express our competence to solve the problems of the motor-car versus the pedestrian, children's play spaces, and effective recreation spaces and so on. A

move away from mere street-side layouts could create a sympathetic environment which would satisfy more needs and replace the tawdry semi-detached image. The theme must always be compact and related buildings for urban scale not low-density sprawl. We must discard the concept that low-density equals high amenity and we must freely experiment to discover new patterns of residential amenity, in urban terms.

None of this will, however, involve the public if we do not at the same time bring the unit planning closer to the realities of modern living. Most of our houses, flats (and maisonettes) are out of date and their planning can only be called habitual; we use house plans that have grown from vague habits and customs and instead of producing room arrangements that are flexible and impressionable for the varieties of use that are required, we continue to produce arrangements that are rigidly inconvenient to our changing ways of living. Not that people's needs are easily discovered; there is no market-research in this field (and I wouldn't trust it, if there were) but here again we need to experiment continuously and in the process we can create considerable diversity of accommodation within standardised (repetitive) methods. Such small experiments that I have carried out in my own work have convinced me about the differences between people's prejudices and their needs. Pandering to prejudices may be easier but the satisfaction of needs is the only way we can involve the users of our buildings.

Snob Prejudice

My favourite example of snob prejudice is the service hatch between kitchen and dining room. I continue to be surprised at the plans of small houses or flats that use this device instead of planning the two rooms en suite. A hatch needs two people's attention or one person dashing back and forth through the corridor and two or three doors. It is an arrangement that overlooks the fact that everyone knows that there are no maids in the kitchen. I have built some hundreds of flats and houses where the kitchen is enclosed by a glazed screen with a door (sometimes plus hatch) and it is such a convenient arrangement that it goes unnoticed.

There are real needs which the architect will ignore at his peril; the need for privacy in bedrooms and quick private access to bathroom and WCs. I was disturbed to see in the winning design of a recent housing competition, an arrangement of rooms where bedrooms and bathrooms were accessible from the living room and where the only access from a bedroom to the WC was across the living room. Such an arrangement is bound to be grossly inconvenient in cases of sickness or when used by children. I have gone to some length in dealing with these points of detail to illustrate that although we need change inside the house, we should not seek mere novelty and neither should we play fast and loose with people's needs and convenience.

At the same time we must raise space standards and the standard of equipment and finishes to give greater convenience and comfort. Most local authority housing has hit bottom in this respect and represents an irreducible minimum. For example, the introduction of devilish foreign ideas like heating (instead of ye English fireplace) means greater comfort but it is also a valuable release for the designer who can create greater convenience in room arrangement. The heating (even background) of the whole dwelling can create flexibility and variety of use for the various rooms so that similar dwellings may be used in different ways by differently composed households. And in terms of tight urban building patterns with varying building heights in close proximity the elimination of belching flues is obviously necessary. I believe that it is possible by mass-production repetitive methods to reduce the cost of building and put back into the building better value by better equipment, but it seems unlikely that high enough standards will be attainable this way. We need simply to spend more money on housing. The attitude of meanness and ruthless economy that dominate housing promotion is unfortunate; it can frustrate the skills of the architect, and mean, minimum dwellings with poor finish and equipment can inspire no love in the hearts of the users.

External Spaces

Nowhere does this meanness and false economy show itself more than in the handling of external spaces. I come back to the problem of layout because not only is it the most important aspect of housing environment, but it is the one that seems most neglected. I believe it is a basic necessity that buildings and space are integrated so that the various elements should combine to form a whole. It is not good enough to hand over the odd spaces to a landscape architect so that they may be decorated. Landscape design should adorn and express the use of the space about buildings. Particularly in urban scale, it is the placing and relationship of the buildings that matters, so that spaces are significant and accesses convenient and so on. The soft furnishings of nature should not be used to obscure spatial relationships but to define and enhance them, which means that the spaces must be right to start with. In fact the whole complex of buildings and spaces must be conceived and designed as one 'building landscape.'

Applying this principle to the layout of urban houses the small size and propinquity of the buildings may mean that front gardens cannot be left to chance and the energy or skill of the individual householder; either the fronts must be walled off to form small paved courts, or the buildings planned so as to allow public access to come close without loss of privacy. If back gardens are kept small (say 500 sq. ft.) it is possible with two-storey houses at density of about 50 persons per acre to create significant common garden areas and garages for all. Such densities can be greatly increased if common garden areas are not included, or by using three-storey houses. But for densities of over, say, 80 persons per acre flats are inevitable.

I do not want to appear reluctant about the use of flats; their use in urban housing must be implicit. Not only do they allow a more intensive use of land, but they can create visual diversity by the variable

A small house interior illustrating the theme of 'Design in Glass Room Settings,' on exhibition at Marshall & Snelgrove until October 14. The design is sponsored by Pilkington Brothers Ltd., and prepared by Derek Patmore and Jack Kinnair, ARIBA, MSIA

heights and shapes of building that are possible. Much opposition to flats stems from unhappy experience in unsatisfactory flats or converted buildings. But socially flats are desirable for the diversity of accommodation they can provide. What we need is greater varieties of accommodation; flats, maisonettes and other hybrids can provide these better than can houses. I would make a special plea for high density low-height flat development. Three- and four-storey walk-up flats can achieve densities of 80-100 persons per acre.

Above four storeys it is customary to use framed structures and, of course, lifts are necessary; we have logically pushed up the heights of the buildings to offset the increased structural and installation costs, but the baffling fact is that the greater the height the greater the cost (per unit). High buildings are necessary for really high densities but the whole subject of high buildings is a prickly one. They are becoming increasingly common because they can serve practical ends, but there is a danger of building high merely out of fashion. Apart from the social and economic aspects the actual shape and architectural quality of a high block can be more important in the town scene than that of a low block: a high bad building can be more of a disaster than a low one. I think that more work should be done on the use of medium-height blocks of, say, up to six storeys; with compact planning I believe it may be possible to achieve fairly high densities at reasonable cost. I know that such heights are unfashionable, but I am working in that direction in my old-fashioned way.

The other planning advantage of flat development is that the buildings can stand in public or common space; whereas with houses, the existence of rear gardens creates layout difficulties. In either case, small private gardens or none seem to satisfy an increasing number of people who are fonder of gardens than of gardening. I am fairly certain that this would apply to the majority of people, if they had the choice—I mean the choice of living in and enjoying the use of spacious, well-maintained, well-landscaped common gardens. The creation of such common spaces must create greater residential amenity than the parcelling up of land into self-contained plots.

Maintenance of Common Spaces

It is clearly no use creating common gardens unless they can be properly maintained and this, of course, is one of the reasons why this critical aspect of amenity is neglected. In fact, the reluctance of so many local authorities to accept responsibility for decently maintaining common gardens on their own housing projects is deplorable; as is their parsimonious attitude to expenditure on broad areas of pavings which could be economically maintained. The same comment applies to spec builders and I am driven to believe that nobody really cares, providing that the dwellings are built and occupied. The creation and maintenance of common space is vital to residential amenity and if the burden cannot be borne by local authorities, then new techniques of management and maintenance cost-sharing ought to be devised.

This country has a noble tradition of landscape design; we have a climate practically unequalled in its capacity to support an enormous variety of vegetation, yet so many housing areas finish up with bits of grass verge and some flowering cherries. And incidentally, we are achieving an international reputation as tree-butchers; again it is sad to reflect that many local authorities set the pace by the ruthless and ignorant lopping of trees in the public scene. While I am still breathing fire about local authorities I must mention the municipal bric-à-brac (signs, lamps, bins, etc.) that litter our streets and do such visual damage to new residential areas. Urban landscape ought not to be dominated by the bad placing of the wrongly chosen articles, and it is gratifying to see that the Civic Trust and the CoID are focusing public attention on such matters. Whether the message has penetrated into many town halls, I do not know. I do know that the architectural message has not yet been received in all of the sheds, attics and annexes that often constitute the town planning departments around the country.

We are left with the main question of how can we create the climate of opinion that will allow the planning and architectural adventure that our housing sorely needs? We have the resources but when are we going to be allowed to use them? Have we had enough of a safety-first, no-change or compromise attitude towards this branch of architecture that affects the lives of more people than any other? Whether we concern ourselves with urban renewal or expanding towns, or small-scale infilling and replacement, the opportunities are a challenge; even the smallest infilling scheme can throw up new patterns and ideas which can enlarge our experience of housing design and extend our understanding of the problems. But we have set up so many safeguards to ensure that no-one does anything wrong, and so many people have so many differing ideas of right and wrong (architectural) that we ought now to stop and ask ourselves if these safeguards are socially beneficial.

I would ask whether we are as decadent as we seem; a society that will not see change as a constant opportunity and appears to have no confidence in its own time (never mind no hope in the future) has the hall-mark of decadence. This cannot be true while there are enough people to shout their heads off about these and similar issues. Our democratic system sets a high value on the safeguard of the majority rule, but this is no cultural safeguard where the majority is not cultured.

The lack of informed opinion has created a vacuum in which various kinds of preservationism take the place of the positive planning that our towns need; and alongside this negative attitude, brash commercial exploitation in the worst taste is tolerated, often in the name of modern progress. I hope that this does not seem to you to be outside the subject of urban housing: this is the context in which we must work, in which our towns must grow. To preserve the finest of our past is a serious responsibility and we should preserve even the not so fine where it cannot be replaced by better, but preservation is a part of planning and is no substitute for it. Similarly aesthetic control is no substitute for planning and like all forms of artistic censorship it is at least foolish and eventually must be dangerous in that it inevitably must stifle free experiment and development.

We have skills to create housing worthy of our time; the need exists and the opportunities can be seen if we can disentangle and thin out the web of outmoded ideas, misguided legislation and downright prejudice that obscures our vision. To do this will need the most earnest collaboration between the various professions if the laymen and legislators are to be inspired with the same objectives.

The Work of the LCC

I hope that I am not giving the impression that I see no good anywhere; that is not my view. There are a great number of dedicated men and women who are making important contributions; for example, no-one can think about housing in this country and not realise the value of the housing work of the LCC, which rightly has an international reputation. And the latest work at Peterlee is I think the most interesting housing to come out of the new towns. Cumbernauld has a town-plan dedicated to an experiment in traffic segregation which everyone is watching with considerable interest.

There are small schemes and buildings going up here and there which show that new thinking is producing rewarding results. But few local authorities have, like the LCC, seen the housing problems as a challenge to be met with new ideas for creating architecture and a new domestic environment. Most new towns (with all their successes) are committed to a low-density image. Few speculative builders indeed see housing as anything but an old business made tricky by changing architectural styles, to which they must pay lip service, sometimes (if they can't avoid it).

If what I said earlier about the need for group-housing is to be pursued, then it is obvious that it is only the local authorities and the spec-builders who can supply our needs; there are not many to do so yet. I have talked about the need for experiment in unit planning and site planning, and the need for integrating buildings and spaces and the critical problem of maintenance of spaces. I have suggested that density is not a direct guide to environment and that anyhow it is fallacious to regard low-density as necessarily creating high amenity.

The retreat from the city goes on and this means also the rejection of urban values. The alternative to this retreat would be to make our cities work and to reclaim bad lands, the twilight areas, and renew them. This could be our biggest housing opportunity and we must face up to the difficulties in renewing these areas with their multiplicity of small ownerships which militate against effective large-scale redevelopment. The planning challenge of our time is urban renewal.

Crane Collapse

Fatal Injury on London Site

FIVE MEN who were engaged in the final stages of the erection of a Liebherr tower crane on the new Museum telephone exchange and radio tower off Tottenham Court-road, London, fell 60 feet to the ground when the crane heeled over on to the newly excavated site on Tuesday, September 19. One of the men died in hospital later; the other four were injured, one of them seriously. An inquest opened on September 21 and was adjourned without evidence being given to October 18. The crane, which was of German origin but made in Ireland, was new.

Regulations in general terms governing the erection of cranes are given in the Building (Safety, Health and Welfare) Regulations, 1948, and the 1958 amendment. A spokesman for the Ministry of Labour pointed out to a 'Builder' representative that with such a wide variety of lifting appliances available it would not be possible to cater for each type individually. If this were attempted, the regulations would be unwieldy and by the time they could be brought into operation modifications would have made them obsolete. The subject is therefore dealt with generally: lifting appliances should be adequately and securely supported and anchored; plant supporting a lifting appliance shall be of adequate strength and good construction; the erection of a crane shall be under the supervision of a competent person; cranes should be examined at specified times to varying degrees by a competent person and records kept.

Regulations Covering Foreign Cranes

Other clauses cover different aspects of use and maintenance.

There are no different regulations governing the use of foreign cranes in this country than for those of British manufacture, though it is to the maker's advantage from the sales angle to ensure that they comply with BSS and other requirements. The cranes on erection will have to be examined by 'a competent person' who will quite often be a qualified representative of the insurance company involved. Reports of this and other examinations are shown to factory inspectors on their site visits. Nevertheless, however stringent regulations may be, they only deal with material things and cannot control the human element.

Various crane manufacturers provide services for contractors purchasing their products. They supply supervision for initial and subsequent erection and dismantling, and provide mechanics for interim maintenance. Some of these services would be charged for whilst others might be included in the original cost. They are provided to enable the contractor to install and use what may be a new piece of plant economically.

The crane collapse on the Maple's site

'Official Architecture and Planning'

Development Envisaged Through Acquisition by The Builder Limited

ANSTEY PRESS LIMITED, which publishes the monthly journal 'Official Architecture and Planning' has been acquired by The Builder Limited, publishers of 'The Builder.'

There will be no change in the editorship or general editorial policy of 'Official Architecture and Planning,' which will continue to be published as a separate journal, but the increased resources now available will enable a wider and more efficient coverage of current architecture and town planning to be undertaken. Beginning with the January, 1962 issue, a completely new typographical style will be adopted, greatly increasing the visual impact of the journal.

The editorial offices of the journal will remain at 63 Neal-street, London, WC2 (Temple Bar 9304). In due course the advertisement department will also be established at Neal-street but pending completion of these arrangements all advertising matters will be dealt with by Mr. H. J. Kimber at The Builder House, 4 Catherine-street, London, WC2 (Temple Bar 6251).

The Journal's Scope

'Official Architecture and Planning' was founded in 1937 by the late H. Bryant Newbold, FRIBA, under the title of 'Official Architect'; its primary object in those days was to provide a medium through which the work of official architects could be published and their case for better recognition stated. In 1943, when the need for post-war planning was already being appreciated and the future importance of the planning officer was foreseen, the title of the journal was changed to 'Official Architect and Planning Review'; the first issue to appear under this title was largely devoted to the Forshaw-Abercrombie plan for the County of London. The present title of the journal was adopted in 1953; by that time the fight for the proper recognition of the official architect had been won, and it was considered that the current need was for a journal which would cover the the whole field of central and local government building and town planning, whether the work was done by official architects and planning officers or by private practitioners.

Plastics Product Research

Formation of New Society

SIXTEEN MAJOR COMPANIES in the plastic pipe industry, which represents a considerable section of the general plastics industry, have become members of the newly-formed Plastic Pipe Manufacturers Society. The chairman is Mr. F. H. A. Mackrill, and the secretary, Mr. D. F. Dodd.

The main objects of the Society are to encourage product research, and to ensure the highest standards of quality in all plastic piping offered by the member companies, by furthering the use of first quality raw material and by the application at all times of the most stringent quality controls. Members are committed to adhere in all respects and at all times to the requirements laid down in any British Standard for plastic pipe. They will, in fact, work towards the general adoption of the Kite Mark of the British Standards Institution.

London Builders' Foremen

An Evening of Splendid Entertainment

THE PRINCIPAL social event in the calendar of the London Builders' Foremen's Association, the annual ladies' festival, was held this year at the Connaught Rooms, London, WC, on September 23. The members of this Association, now celebrating its thirtieth year, spend countless hours sitting on committees and attending meetings to work out details of education, recruiting and welfare, and it was to this voluntary and invaluable work that MR. R. F. MANSELL, FIOB, MRSH, referred when he proposed the toast of the LBFA and its president, Mr. A. Derrett, last Saturday evening.

'It was in 1921,' said Mr. Mansell, 'that Mr. E. J. Brown, the then director of the LMBA, made the suggestion that an association should be formed of foremen who worked for London firms of builders. The LBFA became affectionately known as "Brown's babies," and Brown himself, as "Pa Brown." Their strength, responsibility and authority has grown with their increasing numbers, and their administrative achievements have proved their value in an expanding industry. Present-day foremen' concluded the speaker, 'require understanding, character, leadership and integrity to tackle their job of organisation and management at a much higher level than ever before.'

In his response, MR. DERRETT pointed out that the industry in its turn would have to accept the foreman as a member of the hierarchy of management; and the foreman himself would have to accept the increased responsibility. He had to keep pace with new techniques and specialised knowledge and in this last respect both the foreman and the student could help by a useful exchange of knowledge.

The toast of 'the Ladies' was proposed in a short dissertation on the Common Market by MR. P. E. SHIRVILLE in which they were regaled with the most flattering superlatives and assured that competition from Europe would be negligible. MRS. I. D. PARFITT, the vice-president of the London Master Plasterers Association, briefly replied.

All praise must finally go to the Association's ladies' festival committee, who, under its chairman, Mr. W. S. L. Trickey, provided a memorable evening of entertainment which included dancing, free table lotteries, an 'unpaid tea-break,' an excellent cabaret and gifts for the ladies.

Length of Building Apprenticeship

Working Party's Recommendations to be Discussed

ADDRESSING the half-yearly general meeting of the North-West Federation of Building Trades Employers at Leyland on September 22 MR. FRANK RUSSON, FIOB, president of the National Federation, pointed out that for some time many had held the view that the period of apprenticeship for the building crafts was longer than it need be. The subject, he continued, had been engaging the attention of the NFBTE and earlier this year it set up a working party, under the independent chairmanship of Sir Graham Savage, to consider the length of apprenticeship in the industry. A term of reference was that particular attention was to be paid to those who had followed the existing arrangments for full-time education—including vocational training—up to the age of sixteen.

At present the time spent by an apprentice at a craft was accepted as proof of his competence in that craft, so that the craftsman's standard rate was payable to any apprentice who completed his apprenticeship period (normally five years) and was age 20 or 21. This inevitably meant, Mr. Russon went on, that no account was taken of differences of ability. The working party had therefore considered whether, in determining the degree of competence marking the transition from apprentice to craftsman, the time had not come when some weight should be given to success in existing craft examinations. The working party's report, which contained a number of recommendations, would come before the council of the Federation for discussion on September 27.

The president assured his audience that all the views expressed by regional federations' representatives in the discussion at the council meeting would be taken fully into account in determining the ultimate policy. Some full and frank discussions on the subject would then have to be held with the representatives of the building unions, who were naturally vitally concerned in this matter, and without whose co-operation no real progress could be made.

Apprentices' Supper

Another Successful Annual Gathering

MANY PERSONALITIES from the field of education were present at the 15th annual apprentices' supper held by Higgs and Hill Ltd. at the Ardington Rooms, Clapham Junction, SW11, on September 23. Many of the boys had travelled from the company's branches at Coventry and the Midlands to be present. The supper was chaired by MR. GERALD A. HILL, OBE, who introduced as his chief guest Major General C. Lloyd, CB, CBE, Director of the City and Guilds of London Institute.

Mr. Hill opened the proceedings by welcoming the guests and presenting statistics on apprentices now employed by the company. Over the past year nine apprentices had passed out as craftsmen, eight of whom were still with the company. Twenty-eight boys had joined over the year, making a total of 66. The ratio of apprentices to craftsmen in the London area at the moment was 1 in 9, said Mr. Hill. He also praised the success of the apprentices in recent international competitions.

In his address, MAJOR GENERAL LLOYD spoke of the enormous changes to be expected within the industry. So rapid would the changes be, he said, that, possibly in 20 years time, apprentices would not be doing the same job as they were being trained for now. Science and technology were accelerating at a tremendous pace.

Guests included Mr. D. A. G. Reid, Principal of the Brixton School of Building, Mr. R. H. Towle, LMBA Education Officer, Mr. E. L. Jones, MBE, NFBTO, London Regional Secretary, and Mr. Norman Keep, FRIBA.

Tea Breaks

London Districts of Unions to Support Continuance of Paid Breaks

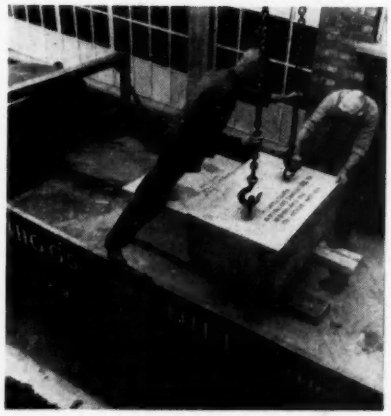
A UNANIMOUS DECISION to support the continuance of tea breaks was taken at a London meeting of the district secretaries of the various building unions, according to the current issue of 'The Builders' Standard.'

In line with this decision it was decided to issue a jointly-signed leaflet to building workers throughout London, stating that the employers were wrong in claiming the unions had agreed to the ending of paid tea breaks. It states:

'The customary practice of having morning and afternoon paid tea breaks should therefore continue and any attempt to stop them should be strongly resisted. Your unions pledge their support in this resistance and members should report at once to their district officers if they find themselves in difficulties.'

The leaflet will be distributed throughout sites in London.

DRILL ORDER.—*The recently published claim that an American firm can manufacture a drill bit that will penetrate any concrete was questioned by Higgs and Hill Ltd., the London firm of contractors and civil engineers. The result was a friendly challenge. Two blocks were specially cast, labelled and despatched. Higgs and Hill, being convinced that Thames Valley shingle aggregate is unbeatable for its great strength, are now awaiting reports from the States with confident anticipation that the American firm has failed to make any substantial impression on this tough London concrete.*



The Face of Britain

A Policy for Town and Country Planning

A group of architects, town planners, economists, sociologists and administrators, at the suggestion of 'Socialist Commentary,' recently drew up a report under the above title. This has now been published in reprint form, copies being obtainable from 11 Great Russell-street, London, WC1, price 1s. 6d. each. Following are some extracts:

Summary of Proposals

1. A MINISTRY OF TOWN AND COUNTRY Planning should be established. Its responsibilities should be far greater than those of the Town and Country Planning Ministry under the 1945 Labour Government. It should have supreme control over planning for location of employment; for house building; and for communications.

2. The Ministry should regulate the distribution of all kinds of jobs through the issue or refusal of development certificates, through the offer of financial inducements or disinducements to firms settling in particular areas, and through influencing the siting of public undertakings.

3. The Ministry should devolve its regional planning powers to Regional Planning Authorities. Failing a reorganisation of the present structure of local government, these should be 'ad hoc' authorities with representatives both of the central Ministry and of constituent local authorities. They should prepare twenty-year Regional Development Plans.

4. A minimum of five and a half to six million homes should be built by various agencies in the next twenty years.

5. The Regional Plans should determine where development is to be allowed. The rest of the land within each region should be 'green land.'

6. Between ten and twelve New Towns, of 100,000 and upwards population, should be built in south-east England within the next twenty years. Other large conurbations also need one or more New Towns apiece. Away from the sphere of influence of the conurbations, larger cities should be developed out of existing small market towns, to act as provincial centres offering attractive facilities for work and leisure.

7. Large decaying and congested areas within towns—and some obsolete industrial towns in their entirety—should be redeveloped simultaneously according to three-dimensional comprehensive development plans. Urban renewal should no longer be carried through piecemeal.

8. A National Development Corporation should be established. It should be organised on the lines of the present New Towns Corporations, but its activities will be nationwide. It should be responsible to the Minister of Town and Country Planning and accountable to Parliament. It will build houses, either for leasehold sale or for rent; offer its resources to local authorities who lack the resources to plan development for themselves; contract to commercial organisations wishing to invest in housing; and offer its services to Co-operative Housing organisations.

9. The planning of major roads and transport arteries, and the integration of traffic planning with land use planning and town design, should be a responsibility of the Ministry of Town and Country Planning to which, in these respects, the Ministry of Transport should be subordinate.

10. The regional planning authorities should be responsible for preparing coordinated traffic and communications plans in their own areas, covering motorways and trunk roads, railways, bus services, terminal parking facilities for motorways, and the development of other transport facilities (such as monorails) where appropriate, fully integrated with plans for land use.

11. Traffic planning in towns should be based on a comprehensive plan for all forms of transport, of which public transport by road and rail—as well as roads and parking spaces for private vehicles—is a vital element. The unimpeded flow of public road transport should be ensured by making the private user pay the full economic and social costs of using land for parking or loading, and by subsidy if necessary.

12. Public investment in new and improved urban roads should be substantially increased. Grants should be made available not only for the road improvements but also for all land acquisition and works required to achieve a balanced planning solution, a satisfactory architectural and landscape design, and the creation of precincts or channels of communication for pedestrians.

13. A Planning Research Board should be created, within the Department of Scientific and Industrial Research, to finance town planning research of all kinds, particularly in the universities, including studies of economic and social costs and benefits in traffic, and the preparation of manuals and studies to guide the planning and local authorities in the problems of traffic planning and comprehensive development.

14. The freehold interest in all land should be vested, from a date to be determined, in a public authority. Each building will be given a statutory 'life' according to its age, condition and suitability. The former freeholders will hold the land under statutory leases for the remainder of the statutory life of the building. There would be provision for compensation, safeguards for owner-occupiers, and procedures to provide land at a low cost, or no cost, for public purposes.

The report is signed by: R. W. G. Bryant (*formerly of Coventry Town Planning Department*), David Eversley (*Senior Lecturer in Economic History, University of Birmingham*), Peter Hall (*Lecturer in Geography, Birkbeck College, University of London*), W. G. Howell (*Architect*), Lewis Keeble (*Senior Lecturer in Town Planning, University of London*), Malcolm MacEwen (*Author and journalist, specialising in town planning and traffic problems*), Robin Marris (*Economist, Fellow of King's College, University of Cambridge*), Hugh Morris (*Architect*), D. L. Munby (*Reader in Economics and Organisation of Transport, University of Oxford*), D. Searle (*Chartered Valuer*), Graeme Shankland (*Architect and Town-planner*), Alison Smithson (*Architect and Town-planner*), Peter Smithson (*Architect and Town-planner*), Betty Trevena (*Town-planner*), John Voelcker (*Architect*), and Peter Willmott (*Deputy Director, Institute of Community Studies*).

Land Ownership and Land Values

FOLLOWING IS THE SECTION setting forth the group's proposals for public ownership of land:

At the heart of nearly all town planning problems lies the question of the land, its ownership, its price, and the compensation to be paid either for compulsory purchase or for the refusal of planning permission. Traditionally the Labour Party has treated land as a scarce but essential commodity, on which the entire life of the nation depends, to be used in the interests of the community and not to be exploited for purely selfish purposes. The Conservative Party, on the other hand, has always placed the principle of private ownership first. It has relied upon the price of land in the market to determine the use to be made of it and the compensation to be paid for it. It has regarded public ownership or compulsory purchase as regrettable necessities to be confined within the narrowest possible limits.

In 1947 the Labour Government's solution of the land problem was to nationalise development rights in land, and to recover the increased values resulting from development by imposing the development charge. For the reasons already given this solution did not work satisfactorily, and there is no point in returning to it. In its latest policy statement 'Signposts for the Sixties,' the Labour Party Executive proposes to establish a Land Commission to purchase the freehold of land on which building or rebuilding, privately or by public authorities, is to be authorised. The price paid would be its value for its present use, 'together with an amount sufficient to cover any contingent losses by the owner and to encourage the willing sale of land.' This proposal is extraordinarily vague, but it appears to be adminstratively cumbersome, and to presume that the normal method of acquiring freeholds would be by willing sales. Acquisition of land by this means would be piecemeal at the moment when development is imminent. It is claimed that the method would secure comprehensive development, but

WORKING MEN'S CLUB.—*An artist's impression of the new national headquarters of the Working Men's Club and Institute Union Ltd. which is under construction in Upper-street, Islington, by John Laing Construction Ltd. The main four-storey headquarters building will have a basement car park and there will be a single-storey assembly hall at the rear. The principal elevations are to be faced with Rosso Alpi marble, slate slabs and artificial stone. The building, designed in the offices of the chief architect and chief civil engineer of John Laing and Son Ltd., is due for completion by the end of March, 1962, when it will be opened to commemorate the Institute's centenary*

how it would secure this is not clear, since individual sites would come up for redevelopment over a long period of years. The method proposed would, in fact, lead to prolonged bargaining and delays, stimulate the maximum resistance at the moment of purchase, and would prolong political controversy almost indefinitely.

Yet action is essential; even within the Conservative Party it is being recognised that the present 'free for all,' and the fragmentation of the ownership of freeholds into innumerable holdings, is inconsistent with good planning. The Bow Group of Young Conservatives has suggested the compulsory pooling of land in blocks of comprehensive development, possibly coupled with a capital gains tax. But pooling would simply enable the big owners, in effect, to buy out the small ones. A capital gains tax is too impermanent a solution and does nothing to reduce the cost of land for public purposes. It is worth recalling that the Expert Committee on Compensation and Betterment (the Uthwatt Committee) decisively rejected the idea of compulsory pooling in their final report of 1942. They concluded: 'In a word, the only feasible system of pooling is nationalisation, which is the very result pooling is designed to avoid.'

If there is to be any real solution to the problems outlined in this statement, it is above all necessary to solve the land question once and for all, and at one moment of time. Future generations would thank us for it. The present generation in Stockholm has only been able to plan its delightful new suburbs, which present so pleasing a contrast to our own, because an earlier generation acquired land far beyond the former city limits. Even our own New Towns have been possible only because, at the outset, a public authority became the freeholder.

Public Ownership of Freeholds

The conclusion to which we have come is that the problem can only be solved by an extremely bold and far-reaching measure, which is also central to all our other proposals, and without which many of them could never be realised. We propose that the nation should acquire the freehold interest in all land, subject to a number of conditions and safeguards which, we believe, answer all the legitimate objections that can be made. We do not doubt that our proposals are capable of improvement in detail. Nor do we doubt that they will be severely attacked as 'nationalisation' or as an assault on the rights of property owners. Our proposals can, indeed, be described at 'nationalisation.' They do, undoubtedly, severely limit the 'rights' of property owners to collect unearned values at the expense of the community, or to distort the course of development in the interest of private profit. But it is precisely for these reasons that we are concerned they will be welcomed by all those, who form the vast majority, whose only interest in this matter is to see that our limited resources of land are used in the best way we know, to house our people and to satisfy their needs in a beautiful environment.

How it Would Work. The 'Life' of Buildings

One of the paradoxes of our age is that speculative developers can invest millions in pulling down and replacing relatively modern buildings in good condition, while property owners continue to draw rent from slums and rotten property of every kind, which has long outlived its useful life and for which the tenants have paid over and over again. It is one of the objects of our plan to compel property owners to cease to regard buildings as immortal, and to recognise that buildings, like everything else, wear out, should not yield rent for ever, and should be replaced at the end of their useful life by up-to-date buildings. This is a central feature of our proposals.

From the vesting day, when the law nationalising freeholds comes into force, a public owning authority, which should, we suggest, be the regional planning authority, would become the ground landlord. The existing users of the land and buildings, whether owners, tenants or sub-tenants, would continue in occupation, and would initially pay no rent to the new owners. All leases and sub-leases would remain in force. There would be no immediate changes or upsets, except in the land market—and in the value of the shares of property companies.

Trained valuers appointed by the authority would then begin a systematic valuation and appraisal of all property, beginning with the older buildings which are obsolete or nearly so. This process would be spread over many years. They would assess the reasonable life of each building, taking into account its age and condition, the up-to-dateness or otherwise of its amenities and its suitability for its purpose. The life given to each building would be called its 'statutory life.' It would range from nil up to a maximum, say eighty years, on the principle that eighty-year buildings have normally reached the end of their life and should only be continued in use if they are of exceptional quality or value, architecturally or otherwise.

The law would provide that the former freeholders would continue to hold their land as statutory lessees for the 'statutory life' fixed by the valuers, without payment of rent initially. At the end of the lease the land and buildings would revert to the owning authority. All statutory leases (except for certain forms of non-profitable public or semi-public property) would incorporate a rent revision clause which would enable the owning authority, at intervals of seven years, to fix rents that would recover a share (we suggest fifty per cent) of the increase in the land values for the community.

If, for example, the valuers placed a life of thirty years on a building, the statutory lease would run for thirty years, at the end of which the land and buildings would revert to the owning authority. The rent, initially nil, might have been increased after 7, 14, 21 or 28 years to reflect increased values. At the end of the lease the owning authority would then decide either to renew the lease (for example, if the building had architectural merit, or if it had in fact some years of useful life and it could be retained without impeding the plan for redevelopment),

or, alternatively, that the building should be replaced by a new one under a new eighty-year lease.

Compensation

At the end of the statutory life of the building, but not before, compensation would be paid for the loss of the freehold. This would be assessed on the value of the site (not the building, as this would be treated as worthless at the end of its useful life) for its existing use at the vesting date, plus a percentage (we suggest fifty per cent) of the increase in its value since that date. No compensation need be paid to an owner who sells the unexpired portion of a statutory lease, because the price he receives would take into account the buyer's expectation of compensation when the lease ends.

Change of Use

The statutory lease would restrict the owner to the use to which the land was put at the vesting day. If it was intended to change the use of a building, or to redevelop the land, a new lease would have to be negotiated between the former owner (now the statutory lessee) and the owning authority. The owning authority could then grant or withhold permission, and would have complete discretion, within limits, in fixing the terms of the new leases, so that it could encourage certain forms of urban renewal and other desirable forms of development through reducing the ground-rent liability by specific amounts. New leases granted at the end of the statutory life of a building would be for eighty-year terms at a ground rent that would reflect the value of the site, and would be subject to a seven-year rent revision clause.

Owner-Occupiers

It would be wrong to except owner-occupied houses from our proposals, because it will be essential to redevelop large areas of owner-occupied houses as they become obsolete, and because piecemeal rebuilding of these houses on their separate sites would only perpetuate out-of-date layout and misuse of the land. But at the same time we think the community owes the owner-occupier a guarantee of protection. This would be ensured by the following plan:

Existing owner-occupied houses would be dealt with in the same way as other property. A statutory life would be assigned to them, and the owner would hold the house on a statutory lease at a rent of nil. It would be a matter of policy to decide whether owner-occupiers should be subject to a rent revision clause. At the expiry of the statutory life and of the statutory lease, there would be two alternatives. If the house was then in an area of obsolete property, which the planning authority wished to redevelop, the owner would be paid compensation based on the *freehold* value of the land and *buildings as at that date* subject only to an allowance for any ground rent then payable. If, on the other hand, the area was not ripe for redevelopment, the statutory lease would be renewed on the same terms as before. If, at any time, the owner wanted to sell, the price paid by the buyer would reflect his expectation of receiving compensation at the end of the lease, so that in any event the house-owner would be no worse off.

Public and Non-Profit-Making Services

Land used for public and non-profit-making services, such as schools, roads, parks, hospitals, libraries, churches and public utilities, whether owned publicly or by charitable or other semi-public bodies, would be treated differently. Buildings in these categories would automatically be assigned a statutory life of eighty years, no rent would ever be payable, and the lease would automatically be renewed unless the site was required for redevelopment. Most buildings of these kinds have an indeterminate life, and their social provision should be encouraged by relieving them of all land costs. Profit-making buildings (such as shops, offices or factories) owned by public or semi-public bodies would, however, be treated in the same way as privately-owned property.

When non-profit-making bodies buy land or buildings, these would be resold at cost to the owning authority, which would grant a lease based on the principles above, to relieve them of the cost of land required for non-profit-making services.

Compulsory Purchase and Compensation for Refusal of Planning Permission

There remains the issue of compensation. Public authorities will no longer be able to buy freeholds. When they want to acquire developed land or buildings they will acquire the statutory leases and subleases at the market price. But, as the statutory lease restricts the land to its existing use, the market price will only reflect any increase in value that could arise from a change in use or redevelopment to the extent that the owning authority would have been likely, apart from the compulsory purchase, to have granted a new lease at a concessionary ground rent. As the lease is subject to a rent revision clause, the market price cannot reflect the owner's anticipation of excessive capital appreciation. This would remove the principal evil effected by the 1959 Town and Country Planning Act, under which public authorities may have to compensate owners for the loss of the whole of the hypothetical value the land would have had if sold with planning permission for some highly profitable use.

Compensation for loss of development value resulting from a refusal of planning permission would be limited in the same way that it is limited on compulsory purchase.

Undeveloped Land

The previous paragraphs referred exclusively to developed (that is, built-up) land. Undeveloped land, most of which is used for agriculture, horticulture or forestry, and the buildings used for such purposes, would be dealt with differently. It would automatically be subject to an eighty-year statutory lease, renewable indefinitely, but subject to periodical rent revision, and restricting the land to its existing use. The land could only be developed for another use with the consent of the owning authority, which would grant an eighty-year building lease, at a rent which would recover for the community all or a very large part of the increased value arising from the grant of planning permission (which would be essential) and the change in use. In this way the greater part of the 'betterment' would be collected for the community.

In equity the owners of undeveloped land have no claim to any part of the increased values arising from planning permission or change in use. Land designated for New Towns or similar public works where the entire increase in value and the initiative can be attributed to public enterprise, would be acquired at existing use value. But, in order to provide an incentive to the sale of undeveloped land by statutory lessees for private development, it will probably be necessary to adjust the rents in such cases to leave a percentage (we suggest twenty per cent) of the increased value with the former landowner. If this were done it would be necessary, in fairness and in certain circumstances, to pay some compensation for refusal of planning permission and some additional compensation over and above use value, on compulsory purchase.

Book Review

STANDARD METHOD OF MEASUREMENT ILLUSTRATED. By. G. Chrystal-Smith. London: George Newnes Ltd.) Price 35s. net.

THE STANDAND METHOD of Measurement of Building Works is a formidable looking document, and many a student beginning his studies in quantities must have despaired, not only of ever mastering it but also of ever understanding it. Mr. Chrystal-Smith has assisted this task by producing an illustrated version which should appeal to the experienced surveyor as well as to the student. The author and publishers intend to prepare a revised edition as soon as possible after the publication of the Revised Standard Method but this should not deter from buying.

The author stresses that this book is not intended as a substitute for the Standard Method but as a guide to its better understanding. He has selected various clauses and supplied explanatory diagrams and typical bills of quantities' entries. The book is divided into trades in the same order as the Standard Method, and several of these are supplied with a typical preamble. It seems strange however that catchlines have not been printed as these would have eased reference to any particular trade. The drawings are very clear and should not only be a guide, but also be a help for the student who has to memorise them. The bill of quantities' entries give a clear picture in writing of what the clauses mean. This book should be welcomed in the industry at all levels, although the price may make some students think twice about buying a copy, which would be a pity. J. E.

Home Grown Timber Bungalow

An Experiment at Farnham

THE GREATER PART of the production from forests which have been established by the Forestry Commission comes from softwood thinnings, and as thinnings from the older plantations which are already producing small saw timber trees; the production of saw timber will increase in future. Preliminary trials and investigations (Forest Record No 42, ' The Use of Home Grown Timber in House Construction,' HM Stationery Office) of the use of properly seasoned home grown softwoods for timber buildings have shown promising results and it was decided to use Sitka spruce (which features so largely in afforestation work) and Scots pine in the construction of a bungalow at the Forestry Commission Research Establishment at Alice Holt, Wrecclesham, Farnham, Surrey.

In formulating the house design and specification for a single storey building of adequate size within present day housing standards the commission had in mind the use, in the bungalow, of as much home grown thinnings timber as possible within the limitations of length and sectional sizes available and having regard to the varying needs of internal planning. The largest cross-section used for carcassing members was 2 in. x 5 in. and, apart from the truss rafters and a few end wall studs, virtually all members were less than 9 ft. long. The general arrangement, therefore, is of prefabricated framed external wall panel on dwarf brick walls with light clear span trusses to carry the roof covering. By this means considerable flexibility of the internal planning is permitted. Timber requirements for the design were prepared and details of external wall and roof construction were carried out by the technical staff of Forest Products Research Laboratory, at Princes Risborough, where these items were manufactured.

The timber used in this bungalow is all home grown softwood including the hardboard door facings and the insulation board lining, both of which are standard products selected from the wide range manufactured from home grown softwood thinnings; the insulation boards were factory treated with a flame retardant paint. Timber was specified to comply with the ' Grading of Sawn British Softwoods ' (Forest Products Leaflet No. 49, HM Stationery Office).

Small Size Timber Used

The Sitka spruce timber was supplied from forests in the west of Scotland, where it was sawn to the specified sizes. The logs from which the timber was sawn were 30-40 year old thinnings and not specially selected. All carcassing timber, i.e. rafters, ceiling joists, studding, floor joists, roof and wall boarding is of Sitka spruce. The Scots pine was supplied as selected good quality logs from mature trees grown in the New Forest in Hampshire, and was sawn to specified sizes at the Forest Products Research Laboratory. The flooring and all joinery work, i.e. windows, door frames and skirtings are of Scots pine. All the timber was treated with preservatives which were applied by diffusion process at the laboratory.

The bungalow demonstrates that material from softwood thinnings available in small sizes and short lengths can be utilised by means of a simple nailed type of construction to build a timber dwelling. In addition it is a practical experiment in the use of a diffusion method of timber preservation and in the use of Sitka spruce as an external cladding material. The side and end walls were each built as three separate sections which were bolted together on site. These walls were made from 2 in. x 4 in. vertical studs at 2 ft. centres with 2 in. x 4 in. top and bottom plates and 1 in. thick horizontal boarding. After erection the walls were covered with secret nailed specially grooved 1 in. nominal vertical cladding.

The concrete tiled roof over 1 in. thick sarking board is carried on light nailed trusses at 2 ft. centres; these trusses contain no more timber than a traditional rafter/purlin type of roof but have the advantage of spanning the entire width of the building without the need for any intermediate support from internal walls. This allows complete freedom in the arrangement of rooms and permits a simpler and more economic design of floor construction to be used.

The 1 in. nominal tongued and grooved flooring boards are carried on 2 in. x 5 in. joists at 16 in. centres over wall plates on the usual honeycomb sleeper walls. Floor joists and roof truss members are of grade II timber and all other carcassing is grade III. Flooring and joinery are generally in accordance with the appropriate British Standards. The stresses used in the design of the various members and nailed joints were based on the results of research work carried out on home-grown timbers at the Forest Products Research Laboratory. The durability and general suitability of the materials used in this rather novel type of dwelling will be closely studied as time goes by. The bungalow is occupied by a commission forester and his family.

Timber Bungalow at Alice Holt

The specification included: Preservative treatment using ' TimBOR ' preservative applied by the spray tunnel diffusion method; heating by Rayburn SF/FS range in the kitchen-dining room and ' Baxi ' under-floor draught fire in the parlour; internal wall and ceiling linings of P.D. flame retardant ' Trerock ' coated insulation board manufactured by J. R. Gordon & Co. Ltd.; roof covering of Marley & Co.'s ' Anglia ' tiles and mineral surfaced ' Ruberoid '; roof and wall insulation ' Sisalation ' reflective (thermal) insulation by J. H. Sankey & Sons Ltd.; and internal flush doors made by Crosby & Co. The builder was M. Ventham, of West Liss, Hants.

Specification List for Boilers

ALL THE solid fuel boilers on the British market up to 60,000 Btu will be included in a boiler specification list to be published in October by ' The Plumber and Journal of Heating.' It is intended to increase this service in the future to include boilers of a higher capacity and different firing. The list is available from Dale Reynolds & Co. Ltd., 2 Broad-street-place, London, EC2, price 1s. 3d. per copy, or 1s. 6d. including the October issue of the journal, which will have a new front cover.

The Building Exhibition

A Wide Range of Displays and Discussions

FROM A CORRESPONDENT

BUILDING, the country's largest industry, will have a two-year progress report on show at Olympia on November 15 when Mr. Henry Brooke, Minister of Housing and Local Government, opens this year's Building Exhibition. The exhibition will be open until November 29 and Sir William Holford, president of the Royal Institute of British Architects, will be its president.

Building is an industry which draws on some of the oldest crafts in existence, as well as some of the latest techniques in automated production, and this combination of skills forms the basis of an industry whose components and techniques are changing the face of the country. It is a boom industry with a vast labour force, an industry incorporating aesthetics and sociology, an industry whose products range from bright paints to lumbering machinery, from costly mechanical systems to the simple nail. Every new development affecting it will be on show at Olympia in a display of individual and national interest.

More Products on Show

Increasing rates of development in building have meant an increase in the products on show and, for those concerned with keeping up to date, a visit to the Building Exhibition has come to be a sort of pilgrimage in which interest, education and profit are allied. To make things as easy as possible for visitors, the exhibition is being planned so that products which can be classified generically are assembled in easily recognisable sections. Heating and ventilation equipment, wood-working machinery, contractors' plant and equipment will be grouped in this way as individual parts of what one architect has called 'a stock-taking of progress within the whole of the building industry.'

The exhibition's claim to national interest is backed up by the amount of official representation at the highest level. The Ministry of Works and other official bodies will have stands in which the latest results of their research activities will be on show. Internationally, too, the importance of building is recognised and there will be government-sponsored stands from Finland and Sweden, as well as individual displays of building components from Germany, Holland, Denmark, Spain and Norway.

The organisers of the exhibition are conscious of its function as a focal point for the dissemination of information. In this respect, its capacity to act as a gathering place for knowledge and research which affects building everywhere will be the subject of a great many features whose presence typifies the exhibition's positive contribution to building progress.

A special display will be mounted and a conference called 'Technical Information, its Dissemination and Design' held. This will discuss the problems and difficulties and propose the lines of a solution.

The RIBA's adoption of the SfB system of classification, as evidenced by the publication of the building filing manual, is a necessary first step in the information handling problem. There are still the problems of dissemination and storage; and the even more basic problem of content and design. The model library and special display on the Grand Hall gallery will illustrate the requirements of trade technical literature. The organisers feel that this is an aspect of the problem which can most usefully be shown. The recommendations cover the content, format and design of commercial literature together with its handling and storage in the recipient's office.

The Conference on November 20 will take the form of three papers covering preparation, distribution, handling and storage of technical information. Discussion on them will be led by a builder, a manufacturer, a sub-contractor, a merchant and an advertising agent. This will be followed by a general discussion.

Another special feature is to be a stand assembling some of the individual developments in designing for disabled people. This display has an important application to housing design generally. It will show the methods of building houses with fittings which make them safer and more comfortable for people with physical limitations, and from here it is a short step to realising that these devices, if adopted generally, can make all houses safer to live in—more people are injured in home accidents than on the roads—as well as more convenient for common forms of what can be called 'temporary' disablement such as convalescence or pregnancy.

Another demonstration of the exhibition's function as a discussion centre for topics of interest to all sections of the industry is shown by the conferences which have been arranged by the organisers in collaboration with specialist industrial and professional bodies. There will be a symposium on cranes organised by the London Building Productivities Committee, in which the economics of cranes will be put forward by an expert from the Building Research Station and the views of crane manufacturers by a representative from this section of the industry.

Emphasis on Craftsmanship

Craftsmanship in building forms the subject of another conference—one of vital concern to all connected with building in this era of transition when the dividing lines between the old-time craftsman and the modern industrial technician are becoming blurred.

Working drawings constitute the most important documents to be found on a building site, the one means of instruction and communication accepted as standard between the designer and the men whose work will fulfil his design. These form the subject of another conference in which their preparation and any means of improving them will be discussed. Also related to a special display—'Design for the Disabled'—will be another symposium where doctors, architects and builders will discuss this subject as a special problem and its relation to building progress generally.

This year's exhibition will be bigger than before and will reflect the importance of the building industry. It will provide a total picture of progress in which the latest developments of manufacturers, research workers and designers will be displayed.

Building in Ireland

Increase in NI Housing Subsidies

LOCAL AUTHORITIES in Northern Ireland have welcomed the NI Government's decision to make a further increase in the housing subsidies. The decision was announced on September 5 following Mr. Selwyn Lloyd's visit to Northern Ireland, more dismissals at the Belfast shipyards, a further rise in unemployment generally, and more announcements by local authorities of their intention to defer schemes made too costly by fiscal measures.

Some of the local authorities have now decided to go ahead with schemes, although doubts about the higher building costs and ability of tenants to pay economic rents when unemployment is growing continue to be expressed. A spokesman for the Association of Municipal Authorities said that but for the further increase in subsidies local authority housing 'would have dried up altogether.' He added that the higher subsidies would cover higher costs but rent increases might be necessary. Spokesmen for the Belfast Corporation and the Association of Rural District Councils also agreed that the higher subsidies would cover the higher costs. Coleraine Borough Council has accepted a tender of £240,407 for a new housing scheme to be completed in 18 months, although it is estimated that rents would be higher than those for similar houses built so far.

Wages Rise in Eire

Building costs in the Irish Republic are to rise again as a result of an increase of 7d. an hour in wage rates, bringing the building trades' craftsmen's rate to 5s. 6d. an hour for a 42½-hour working week and other increases. These include one of 10d. an hour for electricians which brings their hourly rate to 5s. 9d. for a 42½-hour working week. Many wage claims directly or indirectly affecting building costs are being pressed. They are made on behalf of workers in private industry, the public services and of employees of the State companies.

THE BUILDER CURRENT PRICES

THE information given on these pages has been specially compiled for *The Builder* and is copyright. It is the intention that the details given should indicate fair average prices of materials, not necessarily the highest or the lowest. The prices apply to large quantities of materials loaded at works, delivered at London Stations or at site in London Area as stated. Prices for smaller quantities ex merchant's warehouse will necessarily be higher so as to include the stocking and handling costs involved. It is recommended that the prices of materials should be confirmed by inquiry from suppliers and merchants.

AGGREGATES AND SAND

Delivered site in full lorry loads. Average of prices for Boroughs of Westminster, Paddington, Holborn and St. Pancras.

		£	s.	d.
Pit Ballast	per yd.	1	5	5
Pit Sand	"	1	3	8
Washed Sand	"	1	6	9
¼ in. Shingle	"	1	4	3
¼ in. Broken Brick	"	1	0	9
Pan Breeze	"	1	5	0
Fine or Coarse Foamed Slag Aggregate (2 yds. of fine and 2.6 yds. of coarse per ton.)	per ton	3	8	0

CEMENT, etc.

Including non-returnable jute sacks or paper bags.

		£	s.	d.
Best British Portland Cement. Standard Specification delivered Charing Cross area.				
8-ton loads and upwards, site	per ton	5	16	0
Below 8 tons down to 4 tons, site	"	6	8	0
Below 4 tons down to 2 tons, site	"	6	12	0
Below 2 tons down to 1 ton, site	"	6	14	0
Rapid-Hardening Cement in 8-ton loads and upwards to site	"	6	6	6
Below 8 tons down to 4 tons, site	"	6	18	6
Below 4 tons down to 2 tons, site	"	7	2	6
Below 2 tons down to 1 ton, site	"	7	4	0
Aquacrete Water Repellent Cement. 32s. 6d. per ton on ordinary cement prices.				
Sulphate Resisting Cement. 32s. 6d. per ton on ordinary cement prices.				
Red, Buff or Khaki Colocrete in 8-ton lots	"	8	16	0
Other colours according to colour. In 4-ton lots from 313s. 3d. to 783s. 3d. per ton.				
White Portland Cement	"	14	0	9
Under 1 ton	per cwt.		17	0
417 Cement (Ultra Rapid Hardening) in 8-ton lots and upwards	per ton	7	8	6
Super Cement (Waterproof), 32s. 6d. per ton above Portland Cement.				
Cullamix Tyrolean Finish, £11 13s.3d. to £14 8s.3d. (1-ton loads and upwards).				
Ciment Fondu and Lightning Brands High Aluminous cement, 6-ton lots and up	"	15	14	6
Stourbridge Fireclay, 6-ton loads at Railway Depot, London	"	6	19	0
Stourbridge Fireclay, 6-ton loads (London sites)	"	7	12	0
Moler Mortar Powder for Flue Bricks (London sites)	per cwt.	1	6	0

BRICKS

Full Loads		£	s.	d.
First Hard Stocks	per 1,000	16	19	6
Second Hard Stocks	"	14	18	6
Mild Stocks (Kiln Burnt)	"	11	5	0
Mild Stocks	"	11	0	0
All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job.				
2½ in. Nominal Fletton Bricks to sites in W.C. district :				
Commons	"	6	12	0
Cellular Commons	"	6	12	0
Keyed do.	"	6	14	0
Rustics	"	8	12	0
Cellular Rustics	"	8	12	0
Single Bullnose Commons	"	8	14	6
Sandfaced	"	9	12	0
Tuscans	"	10	7	0
Saxons	"	10	15	0
Golden Buffs	"	11	2	0
Dapple Light Facings	"	11	9	6
Heather Facings	"	11	5	0
Best Blue Pressed Staffs (London sites)	"	34	0	6
do. Bullnose (London sites)	"	34	19	6
Blue Wire Cuts (London sites)	"	29	19	6
Midhurst Lime Bricks (London sites)	"	11	13	0
Uxbridge Whites (London sites)	"	12	3	6
Special Purpose Sandlime Bricks (London sites)	"	9	2	0
Best Stourbridge Fire Bricks :				
2½ in. (London stations)	"	32	14	0
2½ in. (London sites)	"	33	2	9
3 in. (London stations)	per 1,000	39	4	6
3 in. (London sites)	"	39	15	0
2½ in. Moler Flue Bricks (London sites)	"	31	0	0
2½ in. Machine-made Sandfaced Red Facings (London sites)	"	18	19	0
2½ in. Machine-made Multi Red Facings (London sites)	"	19	4	0
2½ in. Hand-made Sandfaced Red Facings (London sites)	"	20	17	6
2½ in. Hand-made Sandfaced Multi-Colour Facings (London sites)	"	20	17	6
Hand-made Sandfaced Cherry Red Facings, Berkshire district (London sites)	"	21	5	0
Hand-made Sandfaced Multi-Colour Facings, Berkshire district (London sites)	"	21	5	0
Rubber Bricks for gauged arches (London sites)	"	52	5	0
2½ in. Surrey Clamp Burnt Multi Stock Facings (London sites)	"	16	15	0
2½ in. Surrey Kiln Burnt Multi Stock Facings (London sites)	"	18	7	6
Glazed Bricks (London sites), White, Ivory, Brown:				
Stretchers	"	64	0	0
Headers	"	63	0	0
Quoins, Bullnose and 4½ in. Flats	"	80	0	0
Double Stretchers	"	85	0	0
Double Headers	"	77	10	0
One side and two ends	"	87	0	0
Two sides and one end	"	89	10	0
Splays and Squints	"	83	0	0
Cream and Buff, £3 extra over White. Other colours, hard glaze, £8 10s. 0d. extra over White. All above prices plus 47½% for Best quality and plus 47½% less 10% for Second quality.				

PARTITION SLABS, etc.

Delivered Central London Area. (W.C. District).

Minimum lorry loads		£	s.	d.
Hollow Clay Partition Blocks (Keyed)				
*2½ in. 140 yds.	per yd. sup.		4	7
Building Blocks (Keyed)				
*3 in. (6 cavity) 110 yds.	"		5	9
*4 in. (6 cavity) 90 yds.	"		7	3
6 in. (8½ in. × 5½ in.) 1,250 blocks	per 1,000	28	9	0
* Half blocks at no extra charge.				
Clinker Concrete				
2 in. 100 yds.	per yd. sup.		4	0
2½ in. 85 yds.	"		4	7
3 in. 75 yds.	"		5	8
4 in. 55 yds.	"		7	0
Cranham Terra Cotta				
2 in.	"		7	5
2½ in.	"		8	4
3 in. Load bearing quality	"		9	6
4 in. do. do	"		11	6
Moler Partition Blocks				
2 in. 150 yds.	"		12	9
2½ in. 120 yds.	"		13	9
3 in. 100 yds.	"		14	9
4 in. 90 yds.	"		17	0
Lightweight Concrete Building and Partition blocks of Various Sources of Manufacture				
2 in. 100 yds.	per yd. sup.		5	4
2½ in. 80 yds.	"		6	5
3 in. 65 yds.	"		7	5
4 in. 50 yds.	"		9	4
4½ in. 44 yds.	"		10	2
6 in. 33 yds.	"		14	5
Thermalite-Ytong Partition Blocks				
2½ in. 144 yds.	"		7	0
Thermalite-Ytong Load-Bearing Insulating Blocks				
3 in. 120 yds.	per yd. sup.		8	5
4 in. 90 yds.	"		11	0
5 in. 72 yds.	"		13	9
6 in. 60 yds.	"		16	6
8½ in. 42 yds.	"	1	3	8
Floor Blocks and Filler Tiles				
Floor Blocks 12 in. × 12 in. delivered in full lorry-loads :				
3 in.	per 1,000	35	14	0
4 in.	"	38	9	0
5 in.	"	46	1	0
6 in.	"	52	12	0
7 in.	"	64	12	0
8 in.	"	75	9	0
9 in.	"	83	2	0
10 in.	"	92	0	0
Filler Tiles in multiples of 10 tiles per 1,000 multiples :				
12 in. × 3 in. × ½ in.	"	43	13	0
12 in. × 4 in. × ½ in.	"	75	7	0
10 in. × 5 in. × ½ in.	"	75	7	0

STONEWARE DRAIN PIPES, etc.

Glazed Stoneware Standard List (November, 1956).

		4 in.	6 in.	9 in.
Pipes, 2 ft. lengths	per ft.	1/8	2/6	4/6
Bends	each	5/–	7/6	20/3
Junctions	„	8/4	12/6	27/–
Gullies with 4 in. outlets	„	12/6	13/9	22/6

The following are the percentages to be added to the Standard List (November, 1956) prices delivered London Area.
Delivered ex Merchants Wharf or Depot.

	Over 2 tons	Over 100 pieces Under 2 tons	Under 100 pieces Under 2 tons
Best Quality ...	NET	+22½%	+27½%
BSS Best Quality...	+10 % NET	+10 %+22½%	+10 %+27½%
Tested Quality ...	+37½% NET	+37½%+22½%	+37½%+27½%
BSS Tested Quality	+47½% NET	+47½%+22½%	+47½%+27½%

		£	s.	d.
3 in. Land Drain Pipes (in 12 in. lengths)	per 1,000	12	10	6
4 in. do. do.	„	16	16	0
6 in. do. do.	„	34	10	0
9 in. do. do.	„	64	19	0

DAMP COURSE

		£	s.	d.
Hessian base bitumen 7 lb. per yd. sup. in 24 ft. rolls cut to wall widths in lots of £6 value and over delivered London area	per yd. sup.		3	5
Asbestos base do. 7 lb. per yd. sup. do. do.	„		5	2
Lead lined bitumen do. 9½ lb. per yd. sup. do. do.	„		12	2
18 in. × 9 in. British damp course slates	per 1,000	43	8	11
14 in. × 9 in. do. do.	„	32	8	2
9 in. × 9 in. do. do.	„	18	18	9
18 in. × 4½ in. do. do.	„	19	19	9
14 in. × 4½ in. do. do.	„	15	18	3
9 in. × 4½ in. do. do.	„	10	14	3

STONE

		£	s.	d.
Bath Stone				
Monks Park	per ft. cube		10	3
St. Aldhelm Box Ground	„		11	6
Delivered in railway trucks at South Lambeth B.R. Western Region.				
Doulting Stone Random Blocks. Delivered London area	„		10	10
Beer Stone. Delivered London area	„		10	6
Portland Stone—				
Brown Whitbed in random blocks, 20 ft. average delivered in railway trucks at Nine Elms, B.R. Southern Region	„		9	10
Yorkshire Stone—Blue Robin Hood Quality. Delivered to site London in 6-ton lots.				
9 in. × 3 in. Rubbed, weathered, throated and stolled cills	per ft. cube	4	5	10
12 in. × 6 in. do. do. do.	„	3	1	2
12 in. × 3 in. Plain coping, twice throated	„	2	7	6
12 in × 3 in. Weathered and twice throated coping	„	3	3	3
14 in. × 6 in. do. do. do.	„	2	17	0
4½ in. × 9 in. Plinth rubbed on top and face ...	„	2	11	0
3 in. sawn two sides Slabs, random sizes	per ft. sup.		9	1
Templates and Cover Stones, 3 in., 4 in. and 6 in. thick, edges coped for rendered brickwork ...	per ft. cube	1	11	3
do. do. fair one edge for fair faced brickwork	„	1	17	0
Hard York—				
12 in. × 2 in. Square Steps, rubbed on top and edge	per ft. run		11	0
14 in. × 3 in. Round-nosed Steps, rubbed on top and front	per ft. cube	2	18	3
12 in. × 6 in. Plain Steps, rubbed top and front	„	2	11	0
2 in. Rubbed and Jointed Paving, given sizes ...	per ft. sup.		10	3
2 in. Sawn Paving, edges squared, in random sizes	per yd. sup.	3	12	0

TILES AND PANTILES

Delivered London area by road in 6 tons or over per 1,000.

	£	s.	d.
Machine-made Pantiles and French pattern Tiles from Lincolnshire district	35	16	6
Hand-made Pantiles Berkshire district	64	10	0
Hand-made Double Roman Bridgwater district	78	2	9
Hand-made 10½ × 6½ tiles Berkshire district	18	0	0
Machine-made 10½ × 6½ Staffordshire district	17	0	0
Hand-made Hip and Valley tiles per doz.	1	13	0
Machine-made Hip and Valley tiles do.	1	12	0
Concrete tiles 10½ × 6½	8	10	0
do. Interlocking (49S)	19	16	6

NOTE.—Breakage in transit, purchasers' responsibility.

SLATES

First-quality Slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate station. Per 1,000 actual.

	£	s.	d.
24 × 12	160	4	0
22 × 12	126	15	0
22 × 11	114	15	0
20 × 12	107	5	0
20 × 10	105	0	0
18 × 10	71	5	0
18 × 9	62	14	0
16 × 10	54	15	0
16 × 8	42	18	0

NOTE.—Breakage in transit, purchasers' responsibility.

TIMBER

			£	s.	d.
Softwood	Ex Wharf	per standard	£115 to £140		
Joinery quality	do.	„	£94 — £98		
Carcassing quality	do.	„	£112	0	0
1 in. Tongued and Grooved Flooring	do.	„			
Hardwood			£	s.	d.
Mahogany—African S.E.	do.	per ft. cube	1	17	6
do. Honduras S.E.	do.	„	3	5	0
Oak European S.E.	do.	„	2	10	0
do. Japanese S.E.	do.	„	3	0	0
do. English Logs sawn ...	do.	„	2	0	0
Teak 8 in. average S.E. ...	do.	„	3	17	6
Walnut African Logs sawn ...	do.	„	1	2	6
Plywood		per			
6 mm. (¼ in.) Birch Plywood B/BB		100 sq. ft.	4	3	6
6 mm. Israeli Gaboon do. B/BB exterior grade WBP (AX100)		„	4	5	3
18 mm. Birch Blockboard		„	9	7	0
¾ in. Douglas Fir Plywood 96 in. × 48 in. Exterior grade WPB (AX100) solid two sides		„	9	3	0

DOORS (in Lots I-11)

		£	s.	d.
Delivered London area.				
1⅛ in. 4 Horizontal Panel. Pattern 4 in. deal				
2 ft. 0 in. × 6 ft. 6 in.	each	1	16	0
2 ft. 3 in. × 6 ft. 6 in.	„	1	17	6
2 ft. 6 in. × 6 ft. 6 in.	„	1	18	6
2 ft. 9 in. × 6 ft. 6 in.	„	2	0	6
2 in. do. but top panel open. Pattern 4 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	„	2	9	0
2 ft. 9 in. × 6 ft. 6 in.	„	2	11	6
2 in. 2 Panel top panel open. Pattern 2 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	„	2	3	0
2 ft. 9 in. × 6 ft. 6 in.	„	2	5	0
1⅛ in. Plywood Faced Flush Doors to BS459, Part 2A				
2 ft. 0 in. × 6 ft. 0 in.	„	1	12	3
2 ft. 0 in. × 6 ft. 6 in.	„	1	12	3
2 ft. 3 in. × 6 ft. 6 in.	„	1	13	9
2 ft. 6 in. × 6 ft. 6 in.	„	1	15	3
2 ft. 9 in. × 6 ft. 6 in.	„	1	18	0
1⅛ in. Hardboard Faced Flush Doors				
2 ft. 0 in. × 6 ft. 0 in.	„	1	5	6
2 ft. 0 in. × 6 ft. 6 in.	„	1	6	0
2 ft. 3 in. × 6 ft. 6 in.	„	1	6	6
2 ft. 6 in. × 6 ft. 6 in.	„	1	8	6
2 ft. 9 in. × 6 ft. 6 in.	„	1	9	6

SUNDRIES

		£	s.	d.
Delivered London area.				
1 in. Wood Wool Slabs 6 ft. 0 in. × 2 ft. 0 in. in quantities of 1 ton (89 yds. to 1 ton)	per yd.		6	2
1½ in. do. (67 yds. to 1 ton)	„		8	0
2 in. do. (52 yds. to 1 ton)	„		9	9½
2½ in. do. (45 yds. to 1 ton)	„		11	3
3 in. do. (39 yds. to 1 ton)	„		12	7½
½ in. imported or home produced insulation Board, quantities over 5,000 sq. ft.	per 100 sq. ft.	2	2	6
¼ in. Hardboard do.	„	1	17	6
⅛ in. do. do.	„	2	4	6
2 in. Compressed Straw Slabs, roofing quality. 6 ft., 8 ft., 9 ft., 10 ft., and 12 ft. × 4 ft.				
50–100 yds.	per yd. sup.		11	4
101–250 yds.	„		10	10
251–750 yds.	„		10	1
Over 750 yds.	„		9	4
2 in. do. for partitions 4d. per yd. cheaper.				
⅛ in. Asbestos Flat Building Sheets...	„		4	3½
¼ in. do. do. do.	„		6	0
Roofing Felt 1-ply	„		1	9
do. 2-ply	„		2	2½
Best Scotch Glue in slabs	per ½ cwt.	5	3	9
do. pearl	„	5	3	9
Croid Glue	28 lb.	2	6	0
Impact Adhesive	per gall.	2	12	0
Cut Nails 3 in. (1-ton lots)	per ton	84	10	0
do. 4 in. and up (1-ton lots)	„	81	0	0
Wire Nails 3 in. (4-cwt. lots)	per cwt.	4	2	1
do. 4 in. and up (4-cwt. lots)	„	3	19	3

METALS

STEEL JOIST, ETC.

			£	s.	d.
Basis Joists— 6 in. × 5 in., 8 in. × 5 in., 8 in. × 6 in., 10 in. × 6 in., 12 in. × 6 in., plain cut to lengths delivered London area		per ton	47	15	0
Extra for sizes					
3 in. × 1½ in.	4 in. × 1½ in.	„	3	10	0
3 in. × 3 in.		„	2	10	0
4 in. × 3 in.		„	2	5	0
10 in. × 4½ in.		„	1	10	0
5 in. × 2½ in.	5 in. × 3 in.	„	1	15	0
4½ in. × 1½ in.		„	3	5	0
5 in. × 4½ in.	7 in. × 3½ in. 13 in. × 5 in. ...	„		15	0
6 in. × 3 in.	24 in. × 7½ in.	„	2	0	0
6 in. × 4½ in.	7 in. × 4 in. 8 in. × 4 in.	„	1	5	0
9 in. × 4 in.	10 in. × 5 in.				
12 in. × 5 in.	22 in. × 7 in.	„	1	0	0

METALS—*continued*

		£	s.	d.
9 in. × 7 in. 10 in. × 8 in. 12 in. × 8 in. / 14 in. × 5½ in. 14 in. × 6 in. 14 in. × 8 in. / 15 in. × 5 in. 15 in. × 6 in. 16 in. × 6 in. / 16 in. × 8 in. 18 in. × 7 in. / 18 in. × 8 in. 20 in. × 6½ in. 20 in. × 7½ in.	per ton		10	0
	per ton		10	0
Steel angles average price	per ton	48	15	0
Steel tees average price	per ton	49	15	0
Fabricated work delivered London—				
R.S. Joists cut and fitted	per ton	67	19	0
Compound girders	per ton	72	14	3
Stanchions	per ton	78	9	9
Compound stanchions	per ton	83	4	3
In Roof Work—Trusses and Purlins	per ton	93	19	6
Average prices not for awkward work.				
Angle cleats and ⅜ in., ½ in. and ⅝ in. bolts average price London area	per cwt.	5	10	0
Above prices joists etc. increased by 1·1%.				

Ferro-Concrete Bars and Fabric

		£	s.	d.
Mild Steel Ferro-Concrete Bars British manufacture to BSS 785 ex. Mills. 1 in. diameter and upwards delivered nearest London station	per ton	40	10	0
do. do. ex. London Stock do. delivered London site	per ton	49	10	0
Extras—				
¼ in. diam.	per ton extra	8	12	6
⅜ in. do.	per ton extra	6	12	6
½ in. do.	per ton extra	4	12	6
⅝ in. do.	per ton extra	3	2	6
¾ in. do.	per ton extra	1	10	0
⅞ in. and 1 in. diam.	per ton extra		15	0
Above prices mild steel bars increased by 1·1%.				
Steel wire mesh reinforcing fabric to BSS 1221A.				
Ref. No. 106 7.88 lbs.	per sq. yd.		5	2½
" " 109 4.71 "	per sq. yd.		3	0½
" " 113 1.83 "	per sq. yd.		1	8½
" " 122 7.32 "	per sq. yd.		4	10½
" " 125 4.32 "	per sq. yd.		2	10½

Mild Steel Tubes

Tubes to BSS 1387. Fittings BSS 1740.

Basic List Prices

	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Tubes per ft.	9½	10	1/–	1/2½	1/9	2/3	2/8	3/9
Bends each	1/7	1/9	2/–	2/6	3/8	5/5	6/2	10/7
Elbows, square "	1/8	1/10	2/2	2/6	3/–	4/4	5/2	8/6
do. round "	1/10	2/–	2/4	2/10	3/4	4/8	5/8	9/4
Tees "	2/–	2/2	2/6	3/2	3/8	5/–	6/2	10/2
Crosses "	4/4	4/8	5/6	6/6	8/2	11/–	13/2	21/–
Sockets, Plain "	6	6	8	10	1/–	1/4	1/9	2/6
do. Diminished "	8	10	1/–	1/2	1/6	2/–	2/8	4/–
Backnuts "	4	4	6	7	10	1/–	1/4	2/2

Malleable Fittings

	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Elbows, round each	8½	8½	9½	1/2½	1/8½	2/7½	3/6	5/–
Tees "	9½	9½	1/–	1/4½	2/–	2/9½	4/–	5/6
Crosses "	1/2½	1/2½	1/4½	2/–	2/9½	3/7½	5/2½	7/2½
Sockets "	5½	5½	7	9½	1/–	1/7½	2/2½	3/1½
Backnuts "	3	3	3½	4½	5½	7½	10½	1/5½

Discounts from List prices as follows :—

Galvanised Tube—

	Under 1 ton	Over 1 ton
Light	−37 %	−38½ %
Medium	−33 %	−34½ %
Heavy	−25½ %	−27 %

Black—

	Under 1 ton	Over 1 ton
Light	−47 %	−48½ %
Medium	−43 %	−44½ %
Heavy	−35½ %	−37 %

W.I. Fittings	Malleable Fittings
Light −24½ %	Malleable List
Heavy −20½ %	−14 %+40 %

	Malleable Fittings
Light −30½ %	Malleable List
Heavy −26½ %	−14 %

C.I. Half-Round Gutters

Delivered London per yd. in 6 ft. lengths.

	Gutters	Nozzles	Stop Ends
3 in.	4/4½	3/10	1/1
3½ in.	4/9	4/2	1/1
4 in.	6/1½	4/9	1/8
4½ in.	6/9	5/4	2/–
5 in.	7/6	5/9	2/4

C.I.O.G. Gutters

Per yd. in 6 ft. lengths :	Gutters	Nozzles	Stop Ends
3 in.	5/7½	5/1	1/4
3½ in.	6/3½	5/1	1/8
4 in.	6/11½	5/4	2/–
4½ in.	7/6	6/1	2/4
5 in.	8/2½	7/–	2/8

C.I. Rain-Water Pipes

	Pipes	Bends	Branches
2 in.	9/4	4/9	6/10
2½ in.	9/4	5/4	9/2
3 in.	10/6	6/8	9/11
3½ in.	11/10	7/10	11/11
4 in.	13/9½	9/6	14/2

L.C.C. Coated Soil Pipes

2 in.	10/7	8/2	9/11
2½ in.	11/2	9/1	12/4
3 in.	12/6½	9/11	14/8
3½ in.	14/–½	12/4	17/1
4 in.	15/11½	13/10	20/3

Above prices for gutters, rain-water and soil pipes for under 5-cwt. lots only. Lots over 5 cwt. see List No. 3300, dated February 1, 1955, plus 32½% and tonnage allowance. 4-ton lots 5%. 2-ton lots 2½%.

L.C.C. Coated Drain Pipes

	£	s.	d.
4 in. diameter in 9 ft. lengths per yd. run	1	11	1
6 in. do. do. "	2	5	6
4 in. diameter bends each	1	0	6
6 in. do. do. "	2	14	9
4 in. diameter branches "	1	16	6
6 in. do. do. "	4	7	6
Above prices for any quantity but under 5 cwt. carriage extra.			

Pitch Fibre Drain Pipes

2 in. diameter in 5 ft., 5 ft. 6 in. or 8 ft. lengths including couplings per ft. run	1	6½	
3 in. do. "	1	10½	
4 in. do. "	2	6	
5 in. do. "	4	1½	
6 in. do. "	5	0½	
4 in. diameter short radius ¼ bends each	17	9	
4 in. do. ⅛ bends "	12	11	
2 in. diameter 6 ft. radius bends (5 ft. lengths) "	17	0	
3 in. do. do. do. "	19	8	
4 in. do. do. do. "	1	7	4
5 in. do. do. do. "	2	4	0
6 in. do. do. do. "	2	14	6
Above prices for loads of £60 and over. Loads £25 to £59 19s. 11d. Plus 10% Loads under £25 ... Plus 15%			

Asbestos Rain-Water Pipes and Fittings

All less 17½% discount.	2 in.	2½ in.	3 in.	4 in.
Pipes, 6 ft. lengths ... per yd.	4/7	4/10½	5/11	7/10
Shoes ... ... each	3/–	3/3	3/10	5/2
Single Branches ... "	4/8	5/6	6/7	9/2
Bends, squares or obtuse ... "	3/3	3/7	4/8	6/7
Swan Necks, 4½ in. proj. "	3/7	4/8	5/2	7/3
do. 6 in. do. "	3/10	5/2	5/10	7/10

Asbestos O.G. Gutters and Fittings

	4 in.	4½ in.	5 in.	6 in.
Gutters, 6 ft. lengths ... per yd.	4/4	4/9½	5/9	6/10½
Drop ends ... ... each	3/6	4/–	4/9	5/5
Stop ends ... ... "	1/1	1/2	1/3	1/5
Angles ... ... "	3/7	4/1	5/–	5/10
Nozzles ... ... "	3/6	4/–	4/9	5/–
Union Clips ... ... "	1/9	2/1	2/6	2/11

Asbestos Half-Round Gutters and Fittings

	per	3 in.	4 in.	4½ in.	5 in.	6 in.
Gutters, 6 ft. lengths	yd.	3/0½	3/7½	3/8½	4/4½	6/1
Drop ends	each	2/6	3/–	3/3	3/7	5/2
Stop ends	"	1/–	1/1	1/2	1/3	1/5
Angles	"	2/10	3/3	3/7	3/10	5/2
Nozzles	"	2/6	3/–	3/3	3/7	5/2
Union Clips ...	"	1/3	1/4	1/5	1/7	2/5

	Per ton basis in London £ s. d.
Iron—Staffordshire Crown Merchant Quality	52 17 6
Mild Steel Bars	47 18 0
Mild Steel Hoops	49 10 0
	Ex Merchant's Stock per ton Two-ton lots £ s. d.
Soft Sheets C.R. and C.A.—	
20 gauge	63 0 0
24 gauge	65 10 6
26 gauge	68 11 0
Galvanised Corrugated Sheets, 6-ft. to 9-ft.—	
20 gauge	70 18 0
24 gauge	74 9 0
26 gauge	79 15 0
Galvanised Flat Sheets C.R. and C.A.—	
20 gauge	72 8 6
24 gauge	75 19 0
26 gauge	81 5 0

ALUMINIUM AND ALUMINIUM ALLOYS

(Base Prices)		£	s.	d.
Sheet BS 1740 S1C 18 SWG (36 in. wide)	per lb.		3	0½
Sheet BS 1470 NS3 Utility 18 SWG (36 in. wide)	"		2	11½
Coiled strip BS 1470 S1C 18 SWG (24 in. wide)	"		2	11½
Coiled strip BS 1470 NS3 Utility 18 SWG (24 in. wide)	"		2	11
Coiled strip high purity, 22 SWG (12 in. wide)	"		3	2
Corrugated sheet BS 1470 NS3 Circular Profile 8 ft. × 32 in. × 20 SWG	per sheet	1	14	1
Corrugated sheet BS 1470 NS3 Industrial Profile 8 ft. × 31½ in. × 20 SWG	"	1	19	10
Corrugated sheet BS 1470 NS3 Mansard Profile 8 ft. × 31½ in. × 20 SWG	"	1	13	1
Extruded section BS 1476 E1C simple moulding	per lb.		2	10½
Extruded section BS 1476 E1C 1 in. diam. round	"		2	8
Extruded section BS 1476 HE19WP simple angle	"		3	2
Extruded section BS 1476 HE19WP 1 in. diam. round	"		3	1
Tubing BS 1471 T1C 1½ in. O/D × 20 SWG	"		4	8
Tubing BS 1471 HT19WP 1½ in. O/D × 20 SWG	"		6	3

PLUMBERS' BRASS WORK, etc.

Delivered in London area.

All per dozen	B.S.S. ½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown bib cocks Crutch head for iron	87/–	128/–	—	—	—	—
Toilet bib cocks for iron	109/–	158/5	—	—	—	—

PLUMBERS' BRASS WORK, etc.—*continued*

All per dozen	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdownstopcocksforiron	66/-	95/9	188/-	363/-	522/6	917/6
do. with two unions for lead	89/-	132/-	234/4	472/-	623/6	1,389/6
Double nut boiler screws ...	18/8	26/5	47/6	48/6	67/-	93/6
Heavy Croydon ball valves	77/-	193/6	312/5	568/8	734/10	—
Plumbers' union brass lead to iron	19/6	23/6	38/6	52/10	70/6	165/-
	1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
Caps and Screws	33/-	40/8	59/6	92/5	118/10	155/3
Brass Sleeves	—	31/11	31/11	56/2	74/10	91/5
		1¼×6 lb.	1½×6 lb.	2×7 lb.		3×7 lb.
Lead P. trap with brass cleaning screws		68/6	85/6	137/-		233/9
Lead S. trap do. do.		82/9	102/9	168/3		302/3

Solder :		s.	d.
Plumbers' ...	1 cwt. lots	320/-	3 7
Tinmen's	,, ,,	404/-	4 5
Blow pipe	,, ,,	407/-	4 6
	14 lb. lots per lb.		

Copper Tubes and Sheets

Copper tubes BSS 659/1944 on the basic price of 27d. per lb. plus gauge and manufacturing extras as follows. Minimum quantities, 10 cwt.

	Extra	Total per lb.	Approx. per ft.
	d.	d.	d.
¼ in.×19 gauge	16½	43½	11⅜
⅜ in.×19 ,,	14⅜	41⅜	16½
1 in.×18 ,,	12⅞	39⅞	24⅜
1¼ in.×18 ,,	12½	39½	29⅜
1½ in.×18 ,,	12½	39½	35⅝
2 in.×17 ,,	13⅜	40⅜	57¼

Small Quantity extras :

10 cwts. to 5 cwts.	plus ½d.	per lb.
5 cwts. to 2 cwts.	,, 1d.	,,
2 cwts. to 1 cwt.	,, 2d.	,,

Rolled Copper sheets up to 48 in. wide, basic price plus gauge and manufacturing extras	£	s.	d.
	263	10	0

Zinc

Sheet Zinc,		£	s.	d.
10 gauge (25 SWG),	5 cwt. lots upwards per cwt.	8	6	6
,, ,, 12 gauge (23 SWG),	,, ,, ,, ,,	8	4	0
,, ,, 14 gauge (21 SWG),	,, ,, ,, ,,	8	2	9

Brass Tube

Brass tubes, basic price, plus gauge and manufacturing extras	per lb.	1	9½

LEAD SHEET AND PIPES

Basis selling price to one address in London or Home Counties :

		£	s	d.
Lead Sheet, English, 3½ lb. substance and upwards	per ton	104	15	0
,, Water Pipe, in coils	,,	107	0	0
Lead Soil Pipe, 10 ft. or over 2 in. to 4 in. in dia.	,,	108	10	0
,, ,, ,, over 4 in. dia.	,,	110	10	0
,, Gas or Untinned Compo pipe...	,,	108	10	0

5 cwt. lots and over less 6d. per cwt. off basic prices.

Extras over Basis for quantities under 5 cwt. :

3 cwt. and under 5 cwt.	per cwt.	4	0
1 cwt. do. 3 cwt.	,,	6	0

Smaller quantities than 1 cwt. priced specially.

Supplying sheet lead and lead pipes to less than basis weights and cutting to sizes less than basis charged extra according to current trade schedule.

Allowance for Old Lead, collected, £53 0s. 0d. per ton weighed at buyer's works.

PLASTER, etc.

		£	s.	d.
Coarse Pink in 1-ton loads and over delivered on site	per ton	8	11	3
do. White do. do. do.	,,	9	0	9
Sirapite Coarse BSS 1191 Class C	do.	9	2	9
do. Fine do. do. do.	,,	9	10	6
do. Browning BSS 1191 Class B	do.	9	2	9
do. Board Finish do. do.	,,	9	2	9
Blue Lias Lime, in 6-ton loads	,,	6	17	6
Hydrated Lime (Grey) in 6-ton loads	,,	6	2	0
do. (White) do.	,,	6	12	0
Lump Lime (Grey) do.	,,	5	19	0
do. (White) do.	,,	6	6	6
White Keen's or Parian Cement, in 1-ton loads ...	,,	12	7	6
Pink Keen's or Parian Cement, in 1-ton loads ...	,,	12	2	3
Granite Chips, in 6-ton loads	,,	2	6	9
Hair	per cwt.	4	17	6
Gypsum Plaster Lath or Base Board, ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	per yd.		2	2½
1,200 yds.	,,		2	1½
do. Insulating do. ½ in. thick, 600 yds. and over in one delivery. Delivered site	,,		2	8
1,200 yds.	,,		2	7
Gypsum Plaster Wall Boards, 3 and 4 ft. wide 6 to 12 ft., ½ in. thick, 600 yds. and over in one delivery. Delivered site	,,		2	5½
1,200 yds.	,,		2	4½
do. Insulating do. ½ in. thick, 600 yds. and over in one delivery. Delivered site	,,		2	11
1,200 yds.	,,		2	10

PAINTS AND DISTEMPER

Delivered London area.		£	s.	d.
Ceiling Distemper	per cwt.	1	7	6
Washable Distemper	,,	5	18	0
Gloss Paint	per gal.	2	18	0
Super Snowcem cement paint (in 1 cwt. drums) ...	per cwt.	5	0	0

Lead Products and Oils

		£	s.	d.
Ground White Lead, in 1 cwt. kegs	per cwt.	8	7	6
Genuine White Lead Paint, 1-19 gal. lots in 1 gal. tins	per gal.	3	6	6
Genuine Red Lead, Dry, (1 cwt. lots)	per cwt.	6	17	0
Genuine Linseed Oil Putty, 1 cwt. keg	,,	2	13	6
Size XD quality 28 lb.	per tin		9	0
Raw Linseed Oil (5 gal.) drums extra	per gal.		16	9
Boiled Linseed Oil (5 gal.) do.	,,		17	8

Sundries

Turpentine substitute (5 gal.) drums extra ...	,,	5	4½
do. do. (40 gal.) do.	,,	4	8½
Solignum, Brown (5 gal. cans) Exterior	,,	10	0
Creosote (40 gal. barrels)	,,	2	3
Paste Powder (1 lb. packets)	per lb.	2	4
White Lining Paper	per piece	1	4

VARNISHES, etc.

Delivered London area.		£	s.	d.
Oak Varnish, Outside or Inside	per gal.	2	0	0
Oak, Pale Copal do. do.	,,	2	0	0
Hard Drying Oak for Inside	,,	2	5	0
Crystal Paper Varnish do.	,,	2	8	0
Eggshell Flat Varnish do.	,,	2	2	0
Finest Carriage Varnish	,,	2	7	0
Front Door Varnish	,,	2	4	0
Japan Gold Size	,,	1	12	0
Black Japan	,,	1	16	0
Brunswick Black	,,	1	12	0
Berlin Black	,,	1	10	0
Terebene	,,	1	12	0
Knotting (1 gal. bottles free)	,,	1	15	0
French and Brush Polish (do.)...	,,	1	15	0

GLASS

Delivered London area.		s.	d.
18 oz. Sheet Glass Ordinary Glazing Quality—Cut Sizes...	per ft. sup.		10
24 oz. do. do. do. do.	,,	1	0½
26 oz. do. do. do. do.	,,	1	3
32 oz. do. do. do. do.	,,	1	7½
⅛ in. Rolled Plate...	,,	1	3½
3/16 in. Rolled and Rough Cast...	,,	1	6½
¼ in. do. do.	,,	1	7½
⅛ in. Figured Rolled and Cathedral, Standard patterns—			
White Group 1	,,	1	3½
do. Group 2	,,	1	9½
do. Standard Tints	,,	2	1½
do. Special Tints	,,	7	3
⅛ in. Pinstripe, Hammerstripe, Reeded, Reedlyte and Luminating Group 3	,,	1	8½
¼ in. Wired Cast up to 50 in.	,,	1	10½
¼ in. do. do. 50 in. to 72 in.	,,	2	2½
¼ in. Georgian Wired Cast	,,	1	11

Hollow Glass Blocks—				
P.B.2	Cross reeded	5½×5½×3⅞ in.	each	3 9
P.B.3	Broad reeded	7½×7½×3⅞ in.	,,	5 9
P.B.32	Cross reeded	7½×7½×3⅞ in.	,,	5 9
P.B.4	Prismatic	7½×7½×3⅞ in.	,,	6 6
P.B.5	Flemish	7½×7½×3⅞ in.	,,	5 9
P.B.6	Boomerang	7½×7½×3⅞ in.	,,	6 6
Half Size Blocks—				
P.B.32	Cross reeded	7½×3¾×3⅞ in.	,,	4 10
Radiused Corner Blocks to match up with—				
P.B.2	Cross reeded		,,	8 1
P.B.3	Broad reeded		,,	9 8
P.B.32	Cross reeded		,,	9 8

P.B.2, P.B.3, P.B.32 are also supplied in Light Diffusing Blocks at same price.

¼ in. Polished Plate Glass, G.G. quality—

In plates not exceeding 2 ft. sup.	per ft. sup.	4	7
,, ,, ,, 5 ft. sup.	,,	5	7
,, ,, ,, 45 ft. sup.	,,	7	6
,, ,, ,, 100 ft. sup. ...	,,	7	6
¼ in. Polished Plate, extra sizes, i.e., plates exceeding 100 ft. sup. or 160 in. one way or 96 in. both ways. G.G. quality—Not exceeding 135 ft. sup. or 240 in. one way or 130 in. both ways ...	,,	11	4
Not exceeding 180 ft. sup. or do.	,,	15	0

Plates exceeding 180 ft. sup. prices on application.

Substances other than ¼ in. Polished Plate at Special Prices.

Quantity Tariff—Sheet and Sundry Glass.

The following prices apply to minimum quantities of one size and one pattern delivered by the manufacturer to one site at one time.

Description of Glass—	Minimum quantity	per ft. sup. s.	d.
18 oz. sheet O.Q.	3,000		7½
24 oz. ,, ,, ...	2,000		9½
26 oz. ,, ,, ...	2,000		11½
32 oz. ,, ,, ...	2,000	1	3½
⅛ in. Rolled Plate...	1,000		10½
⅛ in. Figured Rolled and Cathedral Standard Patterns, White Group 1	1,000		10½
do. Group 2	1,000	1	2½
⅛ in. Pinstripe, Hammerstripe, Reeded, Luminating and Spotlyte Group 3	1,000	1	2½
3/16 in. Rolled Plate or Rough Cast	2,000	1	2
¼ in. do. do.	2,000	1	2½
¼ in. Wired Cast, Hexagonal up to 50 in. ...	2,000	1	5
¼ in. do. do. do 50 in. to 72 in. ...	2,000	1	9
¼ in. Georgian Wired Cast	2,000	1	5½

THE BUILDER RATES OF WAGES

AS FROM OCTOBER 2nd, 1961. (Every endeavour is made to ensure accuracy but we cannot be responsible for errors.)

1. Craftsmen and Labourers.

Region	Craftsmen	Labourers
	s. d.	s. d.
England & Wales (Grade A) ...	5 6	4 10½
London	5 7½	5 0
Liverpool and District ...	5 7½	5 0
Scotland... ...	5 6	4 10½

2. Apprentices.

Age	Per cent of Craft Rate	London and Liverpool Dist.	England, Wales (Grade A)
		s. d.	s. d.
15	25	1 5	1 4½
16	33½	1 10½	1 10
17	50	2 9	2 9
18	62½	3 6½	3 5½
19	75	4 2½	4 1½
20	87½	4 11½	4 9½

3. Young Male Labourers.

Age	Per cent of Craft Rate	London and Liverpool Dist.	England, Wales and Scotland
		s. d.	s. d.
15	33½	1 8	1 7½
16	45	2 3	2 2½
17	66⅔	3 4	3 3
18	100	5 0	4 10½

NORTHERN IRELAND is not included; rates fluctuate so much from district to district that reference should be made to local offices.
WATCHMEN.—The rates per shift for watchmen engaged on building sites is 30s. 6d. in London and Liverpool District, and 29s. 3d. in the provinces.
FEMALE OPERATIVES.—In all districts throughout the country except in Scotland the rate of wages for women, aged 19 and over, engaged in craft processes is 4s. 7½d. per hour. Women engaged on work other than craft processes, 4s. 3½d. per hour. In Scotland the rate for the woman craftsman is 4s. 10½d. after a probationary period, and the woman labourer, 4s. 4½d.

MoW Winter Lectures

Programme for October

THE OCTOBER PROGRAMME of lectures—the first for the 1961-62 season—on subjects of interest to the building industry is as follows:

Scarborough.—October 3: 'Small Pipe Central Heating,' by A. Robertson, at the Public Library, Vernon-rd. 7.15 p.m.

Derby.—October 5: 'Practical Formwork Design and Construction for Concrete,' by J. G. Richardson, at the College of Art, Green-lane. 7.15 p.m.

Newcastle-upon-Tyne.—October 5: 'Prestressed Concrete Today,' by H. Kaylor, at the YMCA Connaught Hall, Blackett-st. 7.15 p.m.

Cambridge.—October 9: 'Site Management,' by J. D. Bibby, at the Cambridgeshire Technical College and School of Art, Collier-rd. 7.30 p.m.

Middlesbrough.—October 10: 'Heating Buildings,' by J. Clifford Byles, at the Cleveland Scientific and Technical Institution, Corporation-rd. 7.15 p.m.

Motherwell.—October 10: 'New Building Materials and Methods,' by D. K. Baron and B. L. Clarke, at the Lesser Town Hall. 7.15 p.m.

Lincoln.—October 11: 'The Settlement of Buildings,' by S. R. Rosenak, at the Technical College, Cathedral-st. 7.15 p.m.

Blackburn.—October 12: 'Colour and Light in Buildings,' by A. E. Hurst, at the Municipal Technical College. 7.15 p.m.

Darlington.—October 12: 'Practical Aspects of Site Investigation,' by S. J. Button, at the College of Further Education, Northgate-building. 7.15 p.m.

Paisley.—October 12: 'New Building Materials and Methods,' by D. K. Baron and B. L. Clarke, at the Town Hall. 7.15 p.m.

Coventry.—October 17: 'Small Pipe Central Heating,' by W. J. G. Langstaff, at the Technical College, Butts. 7.15 p.m.

East Ham, London, E6.—October 17: 'Concrete Handling on Building Sites,' by A. W. Rickard, at the Technical College, School of Building, Arragon-rd., E6. 7.15 p.m.

Dumfries.—October 17: 'New Materials and Their Use in Building,' by B. L. Clarke, at Oughtons restaurant. 7.15 p.m.

Banbury.—October 18: 'Prestressed Concrete,' by H. Kaylor, at the North Oxfordshire Technical College and School of Art, Bath-rd. 7.15 p.m.

Haverfordwest.—October 18: 'Glass,' by N. Shevlan, at the Services Club, Quay-st. 7 p.m.

Manchester.—October 18: 'Recent Developments in Concrete,' by A. J. Harris, at the College of Building, Hardman-st. 7.15 p.m.

Nottingham.—October 18: 'Work Study in the Building Industry,' by R. Geary, at the Technical College, Burton-st. 7. 15 p.m.

Sheffield.—October 18: 'Fire Resistance of Concrete Structures,' by M. R. Hollington, at the Department of Building and Civil Engineering, College of Technology, Salmon-pastures, Warren-st. 7.15 p.m.

St. Albans.—October 19: 'The Settlement of Buildings,' by S. R. Rosenak, at the Hertfordshire College of Building, Hatfield-rd. 7.15 p.m.

West Hartlepool.—October 19: 'Prevention of Accidents in the Building Industry,' by J. A. Hayward, at the Technical College, Lauder-st. 7.15 p.m.

Canterbury.—October 24: 'Building High,' by N. Wakefield, at the City of Canterbury College of Arts, St. Peters-st. 7.15 p.m.

Cardiff.—October 24: 'New Developments in Plumbing and Drainage,' by F. L. Barrow, at the Technical College, Llandaff. 7.15 p.m.

Kingston upon Hull.—October 24: 'The RIBA Form of Contract,' by I. N. D. Wallace, at the Church Institute, Albion-st. 7.15 p.m.

Liverpool.—October 24: 'Swimming Against the Tide,' by Frank Hyams, at the Lyceum Club, Bold-st. 6.15 p.m.

Bognor Regis.—October 25: 'New Techniques in Building,' by D. Bishop, at the Technical Institute, Southway. 7.15 p.m.

Glasgow.—October 25: 'The Fire Resistance of Concrete Structures,' by M. R. Hollington, at the Scottish Building Centre. 7.15 p.m.

Rotherham.—October 25: 'Practical Formwork Design and Construction for Concrete,' by J. G. Richardson, at the College of Technology, Howard-st. 7.15 p.m.

Burnley.—October 26: 'Clerical Methods in Builders' Offices,' by C. A. Francis, at the Municipal College. 7.15 p.m.

Neath.—October 26: Film show—'Building and Civil Engineering Subjects,' at the Castle Hotel. 7 p.m.

Carlisle.—October 30: 'Timber Engineering,' by D. W. Cooper, at the Technical College, Victoria-place. 7 p.m.

Chesham.—October 30: 'Oil Fired Domestic Heating Installations,' by J. W. Musgrave, at the Technical Institute, Whitehill. 7 p.m.

Lower Sydenham.—October 31: 'Small Pipe Central Heating,' by W. A. Hamblen, at the South East London Technical College, Worsley-bridge-rd., SE26. 7.15 p.m.

Whitby.—October 31: Film show—'Building Problems and Techniques,' at the Church-house, St. Hilda's terrace. 7.15 p.m.

Workington.—October 31: 'Preservation of Timber Against Attack by Fungi and Insects,' by Dr. B. S. Belford, at the College of Further Education. 7 p.m.

New Companies

THE FOLLOWING NEW COMPANIES, registered in England, have been announced by Jordan and Sons, Ltd., company registration agents.

RURAL DEVELOPMENT (YORKSHIRE) LTD.—Regd. Sept. 7, 1961. 55 Paragon-st., Hull. Secy.: Evelyn Emslie. Bldrs., etc. Nom. cap.: £1,000.

F. HARRIS & SONS (BUILDERS) LTD.—Regd. Sept. 7, 1961. Dunheved, Fourth-ave., Teignmouth, Devon. Secy.: Winifred S. M. Harris. Nom. cap.: £3,000.

K. J. GIBBONS LTD.—Regd. Sept. 7, 1961. 266a Alfred-st., Central, Nottingham. Secy.: H. Wells. Bldrs., etc. Nom. cap.: £100.

J. KING (BUILDERS) LTD.—Regd. Sept. 7, 1961. 'Four Gables,' Hayes-rd., Nailsworth, Glos. Secy.: L. T. E. Slade. Nom. cap.: £1,000.

BLYTHE BUILDING CO. LTD.—Regd. Sept. 7, 1961. 242 London-rd., Waterlooville. Secy.: W. J. Finn. Nom. cap.: £1,000.

S. REES (PAINTERS) LTD.—Regd. Sept. 7, 1961. 18 Walters-st., Manselton, Swansea. Secy.: D. S. M. Rees. Industrial painter. Nom. cap.: £7,000.

M. M. ROBERTS (BUILDERS, MAIDSTONE), LTD.—Regd. 7, 1961. Lynkay, Lambs-lane, Rainham, Essex. Secy.: A. L. M. Roberts. Nom. cap.: £1,000.

H. R. PIPKIN LTD.—Regd. Sept. 8, 1961. New Bungalow, Hampton Poyle, Oxford. Bldrs., etc. Nom. cap.: £500. Dir.: H. R. Pipkin.

TREVOR H. JENKINS (PORT EYNON) LTD.—Regd. Sept. 8, 1961. Ballee, Port Eynon, Glam. Secy.: M. P. Jenkins. Bldrs., etc. Nom. cap: £15,000

FRANK DAVIS (HALL GREEN) LTD.—Regd. September 8, 1961. Bldrs., etc. Nom. cap.: £2,000. Sub.: R. W. Simmons, 11 Priory-rd., Birmingham 5.

MCCANN AND MUSGRAVE LTD.—Regd. Sept. 11, 1961. 108 York-rd., West Hartlepool. Secy.: K. Musgrave. Designers and constrs. of shop front; shopfitters, etc. Nom. cap.: £2,000.

BICKLEY & RUSSON LTD.—Regd. Sept. 11, 1961. Plumbers, etc. Nom. cap.: £600. Dir.: D. F. Russon, 71 Benson-rd., Winson Green, Birmingham 18.

CANFORD DEVELOPMENTS LTD.—Regd. Sept. 11. 1961. Digby-chbrs. Post Office-rd., Bournemouth. Bldg. contrs., etc. Nom. cap.: £100. Sub.: C. R. Olley.

G. AMBLER & SON LTD.—Regd. Sept. 11, 1961. 20 Ash-st., Ferry-lane, Stanley, Wakefield, Yks. Secy.: Mrs. W. J. Ambler. Bldrs., etc. Nom. cap.: £1,000.

POLLARDS (THIRSK) LTD.—Regd. Sept. 11, 1961. 'Ashmount,' Bagby, nr. Thirsk, Yks. Secy.: . K. Pollard. Bldrs., etc. Nom. cap.: £4,000.

GARTSIDE BROS. LTD.—Regd. Sept. 11, 1961. La Bispham-rd., Carleton, Poulton-le-Fylde, Lancs. Secy.: M. Gartside. Bldrs., etc. Nom. cap.: £10,000.

TECHNICAL REVIEW

This Review of plant, equipment and materials—in most cases new or with new features—is intended to give brief details only of the products mentioned. Notices are based on data supplied by the manufacturers. Additional information and prices can be obtained either direct or by using the prepaid Readers' Service form which appears on page 130 of this issue. The form can be used for more than one inquiry.

1. Concrete

A new liquid CONCRETE ADDITIVE which gives better workability characteristics to concrete is now on the UK market. The additive allows a substantial reduction to be made in water content during mixing and at the same time plasticises the concrete to a uniform quality. Independent tests prior to marketing have shown that, using this plasticiser, the designed strength of a structure can be achieved with a cement content up to 20 per cent lower than specified. The compressive strength of hardened concrete can be increased by up to 25 per cent, and its bond strength to steel by up to 20 per cent. Designed as an aid to mass and reinforced concrete work, the plasticiser increases workability up to 150 per cent, allowing larger pourings and easier finishing.

Quickset Water Sealers Ltd.,
Bentley Works, Doncaster.

2. Corrosion

The prevention of rust is a problem for most manufacturers producing metallic goods and a new ANTI-CORROSIVE TREATMENT to combat this hazard is of some interest. Known as 'Kurust,' the primer is a special formula, combining phosphoric acid with a plastic medium and metallic lead which neutralises rust, turning it to iron phosphate, and then combines this into a rust-proof coat to give cathodic protection to the metal treated. One advantage of this new treatment is that it reduces cost and time involved in rust removal, for it is not necessary to remove more rust than that over 1/1000 in. thick. No separate neutralising solution is necessary and the dangers inherent in that process are eliminated.

A. Sanderson & Co. Ltd.,
Ropery-st., Hull.

3. Engines

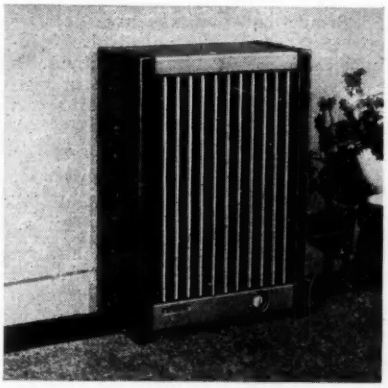
A 2¼ litre DIESEL ENGINE, to replace the existing 2 litre engine at present being used in Land-Rovers, has been designed to give a 21 per cent increase in bhp and a greatly improved torque range. Amongst the advanced features that are incorporated is a modified combustion chamber which is formed with pimples to improve the heat transfer between the chamber surface and the gas, and to assist the mixing of air and fuel. This gives an ultimate reduction in noise by reducing the delay period and thus permitting a more retarded timing without loss of efficiency. It also makes for easier starting at very low temperatures, and in tests conducted by engineers, quick starting was obtained at temperatures as low as minus 20° to minus 30° C. Normal cold starting is also improved.

Integral cylinder bores are used and a new crankshaft of increased strength has been introduced. A speed sensitive automatic injection advance is now fitted to the distributor pump covering a range of 5° crankshaft operation. This innovation allows the engine to run satisfactorily up to 4,000 rpm full load.

In keeping with the increase in cubic capacity, a number of other technical improvements have been made. The cooling capacity has been increased with a larger radiator and larger fan. A heavier flywheel has been fitted giving 8 per cent increase in inertia and the sump has been constructed with a stiffer flange. A new rear oil seal has also been fitted to the engine which will withstand the severe conditions under which Land-Rovers frequently work.

The Rover Co. Ltd.,
Solihull, Warwicks.

4. Heating



A new range of STORAGE HEATERS includes an attractive domestic model with a built-in energy controller giving an effective loading of 1-2¼ kW. To ensure a correct rate of heat dissipation during charge and discharge periods, thermal insulation is incorporated between the refractory material in which the element is threaded and the outer steel casing. In the event of excessive temperature owing to prolonged charging time, the mains supply is disconnected by a special thermal cut-out link surrounding the outer case. For connecting to the mains a terminal block is provided.

Ekco Heating & Electrical Ltd.,
41-47 Old-st., London, EC1.

5. Plumbing

A cold water STORAGE CISTERN, holding 25 gallons, has been made entirely in fibreglass. This offers a number of advantages: for one thing there can be no rust or corrosion as the material is completely unaffected by soft, hard or high acid content water. It is also resistant to a wide range of chemicals and will not support fungus growth. An additional factor is that fibreglass has inherent insulating qualities which not only reduces the risk of frost damage but also affords good resistance to ice formation.

A new reinforced plastics cistern now being mass produced

Although the cistern weighs less than 15 lb., it is very strong and has been designed with a substantial radius in each corner and convex shaped walls to ensure ample rigidity. No special equipment is needed for installation.

Osma Plastics Ltd.,
551 London-road,
Isleworth, Middlesex.

6. Rooflights

An economical method of FACTORY ROOFING, which allows natural light into the interior, is offered by a new constructional system known as 'Clearlight.' Basically, it is a continuous monitor built into a pitched roof. Mounted preferably to rigid portal frames free of lattice supports, 'Clearlight' is constructed by cranking longitudinal purlins (i.e., running the purlins upwards, parallel to the ridge and normal to the roof slope) at selected intervals to form monitor frames. The purlins provide a grid work upstanding from the roof to support glazing frames or lights so that the glazing runs parallel to the roof slope. This allows light to enter the building unobstructed by beams and bracings. Monitors can be spaced according to the light factor required and completely independent of the main stanchion spacing. Maintenance problems peculiar to felt or asphalt type flat roofs are eliminated because the system is adaptable to any roof finish.

Conder Engineering Co. Ltd.,
Winchester, Hants.

7. Technical Publication

As a quick guide to sliding door gear COBURN ENGINEERS LTD. have published an Architects and Builders Specification and Price Guide. The spirally bound booklet is well indexed. Under the correct weight and type coding can be found a full list of gear components, with their prices, and line drawings of gear and main dimensions for fixing.

News in Brief

Monopolies Commission on Wallpaper

THE PRESIDENT OF THE BOARD OF TRADE announced in the House of Commons on July 13, 1961, that he proposed to refer to the Monopolies Commission for an investigation and report on the supply of wallpaper in the United Kingdom. The reference was made on September 25. Any person or organisation wishing to offer evidence should write to the Secretary, Monopolies Commission, 8 Cornwall-terrace, Regent's Park, London, NW1.

Works Horticultural Show

EMPLOYEEES of Messrs. Elliott's of Reading (Samuel Elliott and John P. White (Reading) Ltd.), the joinery and shopfitting specialists, on September 23 held their eleventh annual Horticultural Show in the canteen at the company's works in Gosbrook-road, Caversham. Prize moneys were not high but the simple pleasures of having a gargantuan marrow or some cherished chrysanthemums judged the best afforded competitors much satisfaction. There were no less than sixty-six classes, ranging from 'shallots for storing' to Michaelmas Daisies (mixed); and in the domestic produce section there were some tempting open jam tarts. Apart from the cash prizes there were numerous trophies, challenge cups and other special awards. The show was organised by the Works Social and Recreation Club which must be congratulated with the company on an excellent turnout.

Engineering and Building Centre

THE FORMER MASONIC TEMPLE in Broad-street, Birmingham, is being converted at a cost of £100,000 into a centenary-year new headquarters for the Engineering and Building Centre. It is planned to open the new centre in March next year and exhibitors are already being invited to take space. There will be provision for about 600 displays, but the demand has been so great that it has been decided to build an extension immediately. The new centre is, in fact, a direct descendant from the city's Iron and Coal Exchange which was founded in 1861 and flourished for 80 years. Its place was ultimately taken by the Birmingham Exchange and Engineering Centre in Stephenson-place, which is to remove and link with building in the new project.

The council of the new centre comprises Mr. A. G. Banks, president, Mr. Victor Brenner, vice-president, Mr. B. S. Prichard, honorary treasurer, Mr. C. J. Grazebrook, Mr. Herbert Jackson, FRIBA, MTPI, Mr. A. G. Sheppard Fidler, MA, FRIBA, AMTPI, and Mr. Frank Russon, FIOB. Mr. Anthony J. Cox is the general manager, and Mr. S. Owen, secretary.

Electric Clean Living

ELECTRICITY is contributing with ever-increasing effect, to the achievement of clearer skies over Britain, a fact which the Electrical Development Association will stress on their stand at the Clean Air Exhibition at Brighton (October 4-6). Informative displays on the EDA exhibit will show how underfloor heating provides comfort with cleanliness and economy for bungalows, houses and flats. A special feature will give details of some of the numerous installations in daily use in municipally and privately owned properties in all parts of the country, including the Ring Circuit system of wiring.

Second Equipment Exhibition

IN VIEW OF the success of the first International Construction Equipment Exhibition which attracted 32,862 visitors to Crystal Palace, it has been announced that the next exhibition will be held in June, 1963. The exhibition is organised by Industrial and Trade Fairs Ltd. on behalf of Construction Equipment Exhibitions Ltd.

European Business School Appointment

MR. ADAM JOHNSTONE, chairman of Sales Audits, has been appointed Associate Professor of Marketing by the European Institute of Business Administration at Fontainebleu. This is the first time that a representative from Great Britain has been co-opted to the tutorial staff.

The Late Mr. S. Bellis

THE DEATH OCCURRED on September 17 of Mr. Samuel Bellis, sales manager (central marketing) since 1957 of British Insulated Callender's Cables Ltd. Mr. Bellis had served BICC and its associated companies since before the first world war. He was 63.

Safety Training for Foremen

A NEW APPROACH to accident prevention in industry by training foremen in safety measures, is being launched by the British Safety Council. The council is planning a nationwide series of training courses directed at foremen. The courses, the first of which will be held in London in October, are being organised by Mr. Arthur Greenslade, who has joined the council as head of the training division. It is known that in factories in other countries where foremen have been specially trained in safety, a significent reduction in accidents has generally followed. The new courses will last for four half days, and each will be followed by an examination. Application forms and further details are available from Safety House, 60 Westbourne-grove, London, W2.

Accident Frequency Rate Scheme

IN VIEW OF the encouraging response obtained from the limited number of firms which participated in a pilot accident frequency rate scheme sponsored by the London Building and Engineering Construction Accident Prevention Group, it is now proposed to widen the scheme to include all members of the Group and the LMBA who carry out building and civil engineering work. It is felt that the wider and more comprehensive the coverage the more significant will be the results obtained. Firms participating are required to submit statistical returns by the end of January, 1962. Further information may be obtained from the Group's honorary secretary at 1 Queen Anne's-gate, London, SW1.

New Rainwater System

ALLIED STRUCTURAL PLASTICS, which is owned jointly by the UAM group of companies and Thermo Plastics Ltd., has recently marketed a specially designed pvc rainwater system, and in November will introduce pvc flat and corrugated sheeting, both of which will have the trade name 'Aspect.' The group's activities also cover asbestos cement goods which include flower bowls and garden seats, pitch fibre pipes, translucent sheeting, and a fire-proof and insulating asbestos spray. The company's consultant architect, Mr. E. D. Mills, CBE, FRIBA, MSIA, stressed recently the need for co-operation between the industry and the architectural profession—especially when standard components are to be used—and also the need for efficient and comprehensive systems of technical information.

Dartmouth Castle to Close for Repairs

DARTMOUTH CASTLE, whose 15th-century walls provided the first known open ports for cannon in this country, is to be closed from October 1 until the end of March for repairs by the Ministry of Works. Wet rot in the structural timbers on the first floor is causing advanced decay, which, from a survey made as long ago as 1939, is known to be particularly bad at the wall ends. The 'Old Buttery' which now houses a restaurant will not be affected.

NJC Wage Decisions

Overtime Rates

EFFECTIVE from October 2, National Working Rule 4—concerning overtime and holidays—section B (overtime payments), paragraph (ii)—5-day week, will be amended in the second part to:—'Saturdays and Sundays: Time worked from starting time on Saturday morning until 4 p.m.—time-and-a-half; from 4 p.m. on Saturday until normal starting time on Monday morning—double time.'

Female Operatives Rates

AT ITS ORDINARY MEETING on July 20 the National Joint Council for the Building Industry made amendments to National Working Rule 1 (l)—Female operatives. On page 11 paragraphs (i) and (ii) should, from October 2, read as '(i) The standard rate for Women, aged 19 and over, engaged on craft processes shall be 85 per cent of the current Grade A standard rate for craftsmen. (ii) The standard rate for Women aged 19 and over engaged on work other than craft processes shall be 85 per cent of current Grade A rate for labourers.' On page 12 the paragraph 'The foregoing rates shall be subject to the same adjustment as may be made from time to time in the Grade A Standard Rate of craftsmen.' should be deleted.

Lancashire Schools

Problems of Maintenance

THE FACT that structural repairs costing more than £21,000 are required at five schools recently erected within the area of the Lancashire education committee is revealed in a report prepared by the County's architectural sub-committee, after investigations at the schools. One of the schools concerned, Brookfield comprehensive school at Kirkby, officially opened in 1960 and costing £500,000, requires the complete renewal of defective joints and floorings in the gymnasium and assembly hall, and improvements to drainage and ventilation. Damp has entered this and the other four schools, all of which have flooring defects and two of which have drainage trouble.

The actual tender cost of these five schools was £905,425 which compares with a figure of £1,034,233 which would have been permissible under Ministry of Education cost limits.

We are indebted to the County Architect, Mr. C. H. Simmons, ARIBA, for the following factual outline of the matters which led up to the design of the schools:

The Background to Design

1. '1953, 1954 and 1955 produced an alarming need for school places in a hurry in Lancashire, and my predecessor decided to produce a standard school, so that one set of plans would suffice, with minor addendum drawings for foundations.
2. 'At the same time, there was a local demand for cheaper schools, and, as a result of the design of the standard school and the repetitive working drawings, the cost of the schools was in fact greatly reduced below the financial standards of the Ministry of Education. There was no pressure on Lancashire from the Ministry of Education to do this.
3. 'Some twenty-five schools were built to this standard plan. I have examined them all, and the five you refer to have developed dry rot in the floors of the gymnasia. In most of the cases, this is entirely due to a change in the sub-soil water drainage; ditches have become blocked or changed, and the water level has risen so that the drainage beneath the gymnasia floor has become very wet.
4. 'The total saving below Ministry of Education cost limits was £128,000 for the twenty-five schools. After the repair work had been completed, there will still be a saving of over £100,000 on this programme, which was an experiment in economics, in which certain calculated risks had to be taken by the County Architect and his Committees.
5. 'The remedial work does, of course, involve the use of a waterproof membrane in the five schools affected, and, had it been done when they were built, it would have cost fractionally less than we are having to pay now.

'To recap, the schools were built quickly, and solved a great problem in providing places for the children; the exercise in economics has been successful.'

Personal Column

Aveling-Barford Hire Ltd., formerly Hills Plant Ltd., has appointed MR. G. L. WOOD as its area sales manager covering London, Surrey, Sussex and Kent. Mr. Wood will be based at the company's Reigate depot. MR. K. FILLCUL is to control the new Derby depot.

After 50 years' unbroken service with Leslie & Co. Ltd., London, a member of the Bovis Holdings Group, MR. R. W. JEFFERYS, of Morden, Surrey, has retired. Mr. Jefferys is the first employee to complete 50 years' service.

Sanders & Forster Ltd., a member of the Chamberlain Group of Companies, has appointed MR. L. PEMBERTON sales manager to handle the company's home and export sales for purpose-made and traditional structural steelwork.

MR. J. C. LONGMAN has been appointed technical sales manager of Ekco Heating & Electrical Ltd.

Hunter Douglas Ltd. announce that MR. M. O. L. LYNTON, UK general manager for Luxaflex, has taken up a new appointment at group headquarters in the United States and Canada. His successor is MR. W. L. HEYMAN who joined Hunter Douglas in 1954.

Robert Hudson Ltd. announce that MR. R. A. HUDSON, formerly export sales manager, has now been promoted to specialist duties in the company's manufacturing division. MR. MICHAEL J. THEAKSTON, AMI.LOCO.E, formerly London manager, has been appointed export sales manager and is now based at head office, Leeds. The new London manager is MR. BERNARD A. VICKERY, formerly technical sales representative in that area. MR. FRANCIS THEAKSTON, OBE, MIMECHE, MI.LOCO.E, will continue as consultant director at London office.

MR. L. E. PUDDEFOOT has been appointed a Director of Supply by BB Chemical Co. Ltd., of Leicester.

MR. J. ELLIS has been elected to the board of Messrs. Barfords of Belton Ltd. His appointment is to the position of sales director as from October 1

MR. ROBERT JOLLIFFE has been appointed sales director of Standard Range & Foundry Co. Ltd., of Watford, Herts.

Wolf Electric Tools Ltd., London, W5, has appointed MR. JOHANNES BUNDGAARD as sales supervisor of Denmark.

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OVERSEAS BUILDING

From Our Own Correspondents

AUSTRALIA.—Nearly £A2.5m. is to be spent in the next 12 months on new works programmes for the Royal Australian Air Force. The biggest expenditures will be at bases in Victoria, NSW, and the Northern Territory. The Minister for Air, Senator Wade, had stated that more than £A230,000 will be spent on the construction of airmen's married quarters at Darwin, and a further £A110,000 on improvements to the mess facilities and the rations store. In Victoria, £A190,000 is allocated for a science block at the Air Force College at Point Cook. The NSW works programme includes £A75,000 for a signals operations building for the Air Force Operational Command.

CANADA (ALBERTA).—Construction of a $7m. pipe mill for Page-Hersey Tubes Ltd., has been announced to start immediately.

CANADA (BRITISH COLUMBIA).—The Provincial Government has announced that it will go ahead with the $1 billion Peace River project. Preliminary work is expected to start soon on the Portage Mountain dam site, which will rise 600 ft. above the present river level. . . . Construction of a new Municipal Hall has been announced for Cloverdale. . . . A Government therapy building is to be constructed at Essondale. . . . The Canada Permanent Mortgage Corporation is to construct a new head office building in Victoria.

CANADA (MANITOBA).—The Bridge division of the Manitoba Highways Branch is to construct 16 major bridges and concrete culvert projects at an estimated cost of $3.14m.

CANADA (NEWFOUNDLAND).—Construction of two new vocational and technical schools, costing an estimated $3.6m., has been announced by the Provincial Prime Minister for completion in 1963.

CANADA (NOVA SCOTIA). — Construction is to start this autumn on 12 new vocational schools in the Province.

CANADA (ONTARIO).—A 5-storey, $2m. hotel, 'The Constellation,' is to be built in suburban Toronto. . . , The Imperial Oil Co. has announced a $3m. construction programme to increase their refining facilities at Sarnia. . . . An $8m. seaway terminal is to be constructed at Port Arthur. . . . Shell Oil Company will soon start construction of a new refinery on a 750-acre site near Hamilton. . . . The multi-million dollar plant for Aluminium of Canada, at Kingston, is to be started this autumn for completion in 1963. . . . Construction projects planned for Ottawa include: A $12m. National Library; a new permanent National Art Gallery; a number of new Government office buildings. . . . Construction of additions to Sarnia General Hospital is to cost $2m.

CANADA (SASKATCHEWAN).—International Minerals and Chemicals Co. is to construct a $10m. plant at Esterhazy. . . .Plans for a $26m. residential and commercial development have been announced for

Regina. . . . A multi-million dollar plant is to be built at Saskatoon for International Co-operatives Ltd.

ITALY.—Plans have been announced by Pirelli Societa per Azioni of Milan for a 2,000m. lire (£1,200,000) tyre factory at Villafranca, Tirrena.

RHODESIA AND NYASALAND.—The closing date for the submission of proposals for the establishment of a nitrogenous fertiliser and explosives plant in the Federation of Rhodesia and Nyasaland has been postponed from September 30 until December 31 next, owing to the delay in the completion of the oil refinery project and because of inability of the Federal Ministry of Commerce and Industry to supply a price for the large scale use of Kariba power. Negotiations for the construction of the refinery were expected to be completed by the end of this month.

SUDAN.—Tenders have been invited by the Government for 174 km. road construction between Khartoum and Wad Medani reports Barclays Bank DCO to be financed from American sources.

Overseas Building Notes

NUMBER SEVENTY-FOUR in the useful series of overseas building notes on housing and planning in tropical and subtropical countries, prepared in the tropical building section of the Building Research Station, contains a paper by Mr. W. V. Harris (officer in charge of the Termite Research Unit at the British Museum) which gives partial attention to the entomological aspects of the problem of termites which damage constructional timber. Points of special interest to builders have been emphasised. Other contents include some data on low cost housing at Taiping, Malaya; a list of some recent publications on tropical building, bituminous roofing felts; and some information on Malaya Housing Trust designs. A limited number of copies of this and other overseas building notes is available without charge to organisations and individuals interested in building in Commonwealth and other tropical areas. Application should be made to the director of the BRS at Garston, Watford, Hertfordshire.

Trading Opportunities in Europe

THE EXPORT COUNCIL FOR EUROPE has published its third report on trading opportunities for British firms, completing a fact-finding survey in seventeen countries this year. The current report describes opportunities in Belgium and Luxembourg, Finland, Greece, Ireland, the Netherlands and Turkey. The first report, issued in May, covered Austria, Denmark, France, Italy, Norway, Portugal, Spain, Sweden and Switzerland. The second, issued in June, covered West Germany. Copies of the three reports have already been circulated to trade associations and individual firms but further copies may be obtained, price 5s. each, from ECE at 21 Tothill-street, London, SW1.

Overseas Contract Open

PAKISTAN.—Tenders are invited for the construction of a new oil terminal to the south of the existing bulk oil pier in Karachi Harbour. The new oil terminal will be about 930 ft. long, with an operational depth of 34½ ft. of water alongside to cater for tankers up to about 32,000 tons deadweight. The structure will comprise:—(a) An approach arm about 825 ft. long, having a pipe track, roadway and turning bay; (b) a jetty head 650 ft. long and 38 ft. wide together with five mooring dolphins with connecting walkways. The new jetty will carry the necessary arrangements for oil, products and service pipe-lines hose-handling, fire-fighting and other equipment. It is envisaged that the constructional work will generally be carried out from floating craft and the super-structure of the jetty and associated dolphins will be of normally reinforced concrete supported on steel box piles.

Tender documents may be obtained from either the Chief Engineer, Karachi Port Trust, Karachi, Pakistan, on payment of Rs. 200.00 per set to the Habib Bank Ltd. K.P.T. Branch, or from Rendel, Palmer & Tritton, consulting civil engineers, 125 Victoria-street, London, SW1, on payment of a non-refundable sum of £15.

Tenders are to be forwarded to the chief engineer to the Port Trust to arrive not later than 12 noon on November 6, 1961.

SCOTTISH BUILDER

Industrial Estates Appointment

SIR ROBERT MACLEAN, Chairman of the Industrial Estates Management Corporation for Scotland, announced at a meeting held in Glasgow on September 18 that they had appointed Brigadier R. B. Muir, CBE, BSc, MICE, as General Manager of the Corporation in succession to Mr. W. C. Kirkwood, OBE, MC, who recently retired on reaching the age limit. Brigadier Muir was Assistant Director of Works, War Office, from 1955 to 1957.

New Burgh Architect

MR. WILLIAM T. JACK, deputy burgh architect and planning officer for Dunfermline, has been appointed Burgh architect and planning officer of Inverness Burgh. He was chosen from a short list of three. Mr. Jack was a student of Dundee College of Art. He takes up his appointment on October 30.

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Royal College Extension

A NEW department of social science for the Glasgow Royal College of Science and Technology is to be included in plans for the commercial development of a large area in George-street between Montrose-street and North Portland-street.

About 28 firms interested in the commercial development of the George-st. site are to be asked by the planning committee to incorporate the college extension in their plans.

The whole site was intended originally for commercial development, but at the urgent request of the college authorities, the corporation's planning committee have agreed to make a third of the area available for an extension to the college.

New Buildings

EDINBURGH.—A plan to erect buildings at Southhouse from one to five storeys, providing 600 homes, in place of prefabs, has been approved by the Corpn.

EDINBURGH.—The Corporation is considering proposals to erect an industrial estate in Leith, on the British Ropes Ltd., factory site in Bath-st. Leith Development Committee feel that purchase of the 13-acre site by Edinburgh Corporation could play an important part in the economical build-up of this port. The 13-acre site, at present up for sale, has a number of main factory units which could be separated and made into individual units.

GLASGOW.—Plans for a seven-storey office block costing £200,000, on a vacant site at the corner of Waterloo-st. and Douglas-st. have been approved by Glasgow Corpn. Argyle Securities Ltd. are to provide 40,000 sq. ft. of office accommodation in the building.

GREENOCK.—The Corporation are inviting tenders for the widening and reconstruction of the High-st. section of A8 as dual carriageway. Involved is the excavation of and construction of 1,400 sq. yd. of road foundation, 570 sq. yd. of footpath and 460 lin. yd. of kerbing and ancillary work. Applications to the Master of Works, Municipal-bldgs., Greenock.

HAWICK.—The proprietors of the King's Hotel, Bridge-st., Hawick, have been granted approval for the redevelopment of the adjoining St. Andrew's Church halls for use as hotel lounges, function hall, dining room and kitchen accommodation. Est. cost is £15,000.

KIRKCALDY.—The Dean of Guild Court has approved plans submitted by Fife CC for a new primary school to accommodate 1,000 pupils. The school is to be known as Torbain and it is hoped to begin work upon the same in the spring. Architect is R. S. Lawrie, County Architect, Cupar.

MIDLOTHIAN.—CC invite tenders for several works in one contract for the erection of 12 houses, 9 maisonettes, 9 shop units and 24 lock-up garages in the West Calder central area redevelopment. Applications to County Architect, 32 Palmerston-pl., Edinburgh 12.

THE BUILDER CONSTRUCTION NEWS

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list, see previous issues. Those preceded by the symbol (A) are advertised in this number. The latest date for the receipt of tenders or applications appears above each paragraph. The symbol (R) preceding each entry indicates that applications must be received by this date.

BUILDING

OCTOBER 3

(AR) SALFORD CITY C.—Fixed price tenders for the erection of high sch. for girls at Broughton. Bradshaw, Gass & Hope, architects and surveyors, 19 Silverwell-st., Bolton. Dep. £5 5s. Tenders by Oct. 31.

OCTOBER 4

(AR) BRIERLEY HILL UDC.—Fixed price tenders for 14 houses at Market-st, housing site (section 4). A & Housing Director.

(AR) BRISTOL CITY C.—Extensions to terminal buildings at Bristol (Lulsgate) Airport. City A.

OCTOBER 7

(AR) ESSEX CC.—Firm price tenders for: (1) Ambulance station and CD centre at Basildon; (2) day nursery at Basildon; (3) day nursery at Leyton. County A (separate applications).

OCTOBER 9

(AR) EAST SUSSEX CC.—Erection of a divisional police headquarters and court house at East Grinstead. County A.

(A) KINGSTON-UPON-THAMES RBC.—Fixed price tenders for alterations and extensions for old people's flatlets at Gloucester-rd. Boro' S.

(A) MORECAMBE & HEYSHAM BC.—Extension to transport depot, Heysham-rd. Boro' E&S. Dep. £2.

(AR) PORTSMOUTH CITY C.—Erection of divisional police headquarters at Kingston-cres. Bailey & Piper, architects, 213 West-st., Fareham. Dep. £1.

OCTOBER 11

(AR) LEEDS REGIONAL HOSPITAL BD.—Fixed price tenders for adaptations to labour ward and admission unit at St. John's Hospital, Keighley. A to Bd, Park-parade, Harrogate. Dep. £2 2s.

(AR) LEEDS REGIONAL HOSPITAL BD.—Fixed price tenders for improvements to infirmary block and sanitary accommodation in main block at Castleberg Hospital, Giggleswick. A to Bd. Dep. £2 2s.

OCTOBER 12

(AR) EAST SUSSEX CC.—Erection of a civil defence training centre at Hove. County A.

(AR) HUNTINGDONSHIRE CC.—Fixed price tenders for the erection of a 12 bed reception home. County A. Tenders by Nov. 20.

OCTOBER 13

(AR) BROMLEY BC.—Erection of 30 houses and 70 flats at Burnt Ash-la. Boro' E.

DUBLIN (EIRE) CORPORATION.—Erection of 94 houses and ESB sub-station at Finglas West housing area section. City Treasurer, Exchange-bldgs., Lord Edward-st., Dublin. Dep. 15 gn.

(AR) DUNSTABLE BC.—New assembly hall at civic centre site. TC.

OCTOBER 16

(AR) EAST SUSSEX CC.—Erection of a branch library at Willingdon. County A.

(A) HESTON & ISLEWORTH BC.—Erection of a public convenience at Hounslow. Boro' E&S.

(A) OLDHAM CBC.—Fixed price tenders for demolition of 'Thorneycroft', Rippondenrd., and erection of 8 houses and 8 brick garages on site. Cameron & Middleton, engrs. Surveyors, 21 Mumps, Oldham. Dep. £2 2s.

OCTOBER 18

(A) BATH CITY C.—Proposed conversion of house into two flats and one maisonette at 7 Oxford Row. S of Corporate Property. Dep. £2 2s.

(A) MANSFIELD BC.—Erection of tenants' meeting rooms. Boro' E&S. Dep. £2 2s.

(A) MERE & TISBURY RDC.—Fixed price tenders for public conveniences at the car park, Salisbury-st., Mere. C.

OCTOBER 19

(A) PRESTON CBC.—Fixed price tenders for 141 dwellings and 68 garages at Ingol. E&S. Dep. £2 2s.

OCTOBER 20

(AR) GREENWICH MBC.—Erection of 164 dwellings at Haddo-st. TC.

OCTOBER 23

BELFAST.—Erection of new shop and office block at Rosemary-st., Belfast. George McNeil, chartered quantity surveyor, 29 Wellington-pl., Belfast 1. Dep. £10 10s.

(A) HOVE CORPN.—Erection of ladies' and gentlemen's conveniences at Goldstone Villas. Boro' E&S. Dep. £3 3s.

OCTOBER 30

(A) NEWBIGGIN-BY-THE-SEA UDC.—Fixed price tenders for the erection of 114 'Homeville' dwellings, with external works and services and roadworks. S. Dep. £5 5s.

(AR) NORTH WEST METROPOLITAN REGIONAL HOSPITAL BD.—Erection of out-patient, casualty and pathological depts. at Bedford General Hospital, South Wing, Kempston-rd., Bedford. Regional A, 40 Eastbourne-terr., W2.

NOVEMBER 6

(A) FARNBOROUGH UDC.—Erection of three-storey blocks of dwellings comprising 12 one bed. flats and 12 two bed. maisonettes, etc., at Minley estate. E&S.

(A) MIDDX. CC.—Firm price tenders for 8 sd houses, 16 terrace houses and one block of 4 flats, with roads and sewers, at Picketts Lock-la., Edmonton, N9. J. D. & D. M. Watson M/MICE, 67 Tufton-st., Westminster, SW1. Dep. £10 10s.

(A) NORTH RIDING EC.—Erection of a county prim. sch. at Lakes estate, Redcar. County A.

NOVEMBER 7

(A) HAVANT & WATERLOO UDC.—Erection of 28 dwellings, etc., at Milton-rd., Waterlooville. Thomas, Lamble & Co., surveyors, Pearl-bldgs., Commercial-rd., Portsmouth, Hants.

SERVICES, PAINTING, MATERIALS, ETC.

OCTOBER 11

(A) WILLESDEN BC.—Retaining wall etc. at Salisbury-rd. Bridge, Queens Park. Boro' E&S.

OCTOBER 14

(A) DAGENHAM BC.—Reinforced concrete work in 18 flats at Rainham-rd. south/Cadiz-rd. Boro' E&S.

OCTOBER 16

(A) FRIMLEY & CAMBERLEY UDC.—Installation of 600 refrigerators in Council houses. E&S.

(A) THURROCK UDC.—Rebuilding of 32 chimney stacks in Tilbury area. Estates Manager.

(A) WOKINGHAM BC.—Improvements and repairs to 18 houses. Boro' S.

OCTOBER 21

(AR) BOURNEMOUTH CBC.—Sub-contract work for 72 flats at Kinson estate. Boro' A.

MUNICIPAL AND CIVIL ENGINEERING WORKS, ETC.

NOVEMBER 1

TEES VALLEY & CLEVELAND WATER BD.—Laying of approx. 24 miles of 42 in. to 24 in. bitumen lined and sheathed steel main with welded and johnson coupling type joints. The route of the main will be from Darlington to Wilton (near Middlesbrough) via Billingham; and the work of mainlaying will be divided into five contracts. It is anticipated that three of these will be let in November, 1961, and the remaining two in April, 1962. Clerk of the Bd.

GENERAL BUILDING WORK (LONDON)

FULHAM.—Planning Application.—The LCC has received from R. Wood & Ptnrs. a town planning application for the erection of 19 three-storey houses at Church Gate.

HAMMERSMITH.—Planning Application.—Montague Evans & Sons have forwarded a town planning application to the LCC for the erection of showrooms and warehouse at King's Theatre.

HAMPSTEAD.—Planning Application.—The LCC has received from Keystone Freehold Properties Ltd. a town planning application for the erection of shops, restaurant, maisonettes and flats at Heath-st./Back-la.

HOLBORN & ST. PANCRAS.—Planning Application.—The LCC has received a town planning application for the redevelopment of shops, offices, etc., at Tavistock-pl./Hunter-st./Brunswick-sq., Bernard-st./Herbrand-st. Applicant is C. Harman Hunt & Co.

ISLINGTON.—Planning Application.—A town planning application has been received by the LCC for housing at Crouch Hill. Applicant is MBC.

LEWISHAM.—Housing.—The Housing Committee of MBC has approved layout and detailed plans for the development of the sites of Nos 146-168 (even) Crofton Park-rd. by the erection of 24 flats for occupation by elderly persons and 1 warden's flat in one 2-storey block. Each of the dwellings for elderly persons will comprise a bed-sittingroom and kitchen, and the warden's flat will contain a living room, two bedrooms, kitchen and combined bathroom and wc. The scheme will include 6 communal bathrooms and 12 w.c.'s, a laundry, communal sitting-room, a television room and a guest's bedroom. An outdoor clothes drying area and a small car park will be provided, and the remainder of the site will be laid out as a communal garden for use by the tenants. The plans, which will be exhibited, have been approved by the Minister of Housing and Local Government and planning permission has been received from the LCC.

LONDON (City).—Court of Common Council has approved following: Approval for new office block, in accordance with the plans submitted and subject to certain conditions, at 113-115 Fetter-la. and 20 Breamsbldgs., was given by the Court of Common Council on September 21. Architects are R. Seifert and Partners, 34 Red Lion-sq., WC1. Similar approval was given for the erection of a building at Nos. 38-39 Houndsditch, comprising a basement, ground and first floors to be used as a warehouse and second, third and fourth floors as offices (J. Bothy and Son, 142/4 Minories, EC3). The

demolition of an existing warehouse at 25 New-st.-sq. and the construction of a new office block was approved, subject to certain conditions (F. Durrant, Westmore and Reeves, Cannon-st., EC4).

Drawings for the erection of a 19-storey office building with shops, a public house, a restaurant and a basement car park, at Lee House, London Wall, were approved (Bernard Gold and Partners, Savile Row, W1). Approval was given of drawings for a building on a site bounded by Shoe-la,. and St. Bride-st., the southern boundary of Poppins Court and the Daily Express buildings (Ellis Clarke and Gallannaugh, Soho-sq., W1). The building will have a sub-basement, basement, mezzanine, ground and five upper floors for use for newspaper production offices. Similar approval was given of drawings for an office building on a site bounded by Salisbury-sq., Dorset Rise, Hutton-st. and Primrose Hill (The Prudential Assurance Co. Ltd., Holborn Bars, EC1).

Drawings for the erection of a new building with warehouse, showrooms, offices, confirming houses and accommodation for allied trades in Queen Victoria-st., were approved (R. Ward and Partners, Chesham-pl., SW1). The site is part of Queen Victoria-st., parts Lambeth Hill, and parts of Upper Thames-st. and part of the highway of Lambeth Hill.

PADDINGTON.—Planning Application.—Rebuilding of an extension of Grantchester Hotel, Lancaster Gate, is proposed in a recent town planning application forwarded to the LCC by S. P. Christie.

ST. MARYLEBONE.—Planning Applications.—The following town planning applications have been received by the LCC: Offices, showrooms, workrooms and residential, at five sites in Gt. Portland-st. (Sir J. Burnet, Tait & Ptnrs.); shops, showrooms and flats, at Portman-sq. and Baker-st. (Beard, Bennett, Wilkins and Ptnrs.).

ST. PANCRAS.—Planning Application.—BC has forwarded to the LCC a town planning application for the erection of 16 flats, maisonettes and garages at Prince Albert-rd.

WIMBLEDON.—Flats.—A site in Victoria-dr. has been bought for £21,000 by Messrs. S. A. Thorne, builders, of Blackheath, for the erection of 21 flats, for which planning permission has been obtained. Plans will be completed shortly.

WIMBLEDON.—Flats.—Plans have been prepared by Wimbledon Corporation for the erection of a three-storey block of nine flats with garages and storage sheds in South Park-rd. have been approved by the Surrey Town and Country Planning Sub-Committee.

(PROVINCIAL)

ALDERSHOT.—Hants. CC propose training centre for mentally handicapped adults. . . . The Southern Electricity Bd. propose light engineering and commercial stores, depot, vehicle repair workshop and car park at the Gas Works, Ash-rd.

BASINGSTOKE.—196 dwellings, comprising two-storey flats, four-storey maisonettes and houses, also 147 garages, are proposed by BC, at South Ham estate. Tenders are being invited. Boro' A is E. Almond. . . . RDC propose conversion and modernisation of almshouses at Sherborne St. John.

BELFAST.—Improvement Committee propose a winter unemployment relief scheme for resurfacing carriageways. Est. £103,530.

BIRKENHEAD.—J. H. Jones proposes a two-storey extension at Pensby-rd. . . . Globe & Simpson Ltd. propose erection of workshops, offices and garages at Cathcart-st. . . . Sir Rob. Lloyd & Co. Ltd., Bromborough, propose erection of supermarket, 14 shops, with 11 flats over, and 14 garages and car park, at Arrowe Park estate, Woodchurch.

BLANDFORD (Dorset).—Area planning sub-committee has granted permission to Mrs. E. M. Cowley, to use land for the erection of 23 houses at St. Leonard's House. . . . CC plan multi-service building to provide office and library accommodation on the site of 4 and 5 The Tabernacle.

BOLTON.—Advance Linen Services Ltd. propose erection of warehouse and offices at Manchester-rd. industrial estate.

BOOTLE.—BC propose erection of 36 dwellings at Litherland-rd. Est. £60,400.

CAERLEON (Mon.).—The Council plan to build 24-single person flats, in one block, for old people in the area. The block will have a single central heating system, a community room, and a warden's flat. Work would probably start on the project during spring of next year.

CALNE AND CHIPPENHAM.—Two blocks of 12 flats are proposed by RDC for Corsham.

CHESTER.—Circuits Management Assoc. Ltd., London, propose converting Gaumont Cinema into bowling centre.

CHIPPENHAM.—BC propose aged persons' dwellings at Factory-la.

EAST OAKLEY (Hants.).—NE Hants. area planning committee recommends approval for application by Bernard McManus Ltd. for permission to erect detached houses on 7½ acres near Oakley Stores, East Oakley.

ELLESMERE.—BC has purchased 163 acres land at Stanney-la. for overspill housing development.

EPSOM.—Industrial Investment Services Ltd., London, propose erection of a 4-storey block of shops and offices at the Granada site.

ESHER.—UDC propose 44 houses and 4 flats at Littleheath Farm estate.

ETON.—Plans submitted to RDC: Two blocks of 26 maisonettes and flats and two blocks of 15 terraced houses, and garages, at Slough-rd., Iver Heath for Charles Reed (Builders) Ltd.

FARNBOROUGH.—Ministry of Works propose automatic telephone exchange at the junction of Reading-rd. and Farnborough-rd. . . . C. G. Robinson Ltd., Guildford, propose further 22 houses at the Oak Farm estate.

FARNWORTH.—BC propose erection of 80 bungalows at Harper Green.

FLEET (Hants.).—Outline applications have been received from: A. H. Cope and R. J. Richardson—for erection of 36 houses, 56 flats and garages, on nearly 5 acres, at Woodlands, Church-rd., Fleet; and the Executors of the late T. E. Wenham—for erection of about 30 dwellings on just over 5 acres at Pine-gr., Crookham.

GUILDFORD. — The Council's markets committee is recommending that the Boro' S should be authorised to proceed with the new Guildford Park car park on the Guildford Park brickworks site. Here the council exchanged its existing car park for adjoining land, and will now be able to provide parking space for 700 to 800 cars instead of 180 as at present. Over 200 flats are to be built privately on the car park.

HARTLEPOOL.—A development company is planning the erection of shops and flats at Northgate and discussions are taking place with the TC. . . . Three alternative schemes are to be considered by the Council for a proposed bus station.

HEBBURN (Co. Durham).—UDC Surveyor (R. C. Bestow) has prepared plans for the erection of 102 old people's bungalows on the Ponds Site, and tenders are being invited.

HIGH WYCOMBE.—E. M. F. Brown Ltd. propose erection of new factory at Duke-st.

HINDLEY.—Following for Lancs. EC: New training centre for 60 mentally subnormal children; new swimming baths are being contemplated for 1963/64.

HUYTON - WITH - ROBY.—Ministry approval received by UDC for the erection of a two-storey block of council offices at Derby-rd. Est. £60,000.

LIVERPOOL.—Bent's Brewery Co. Ltd. propose rebuilding 'Warwick Castle' hotel, at Henry-st. . . . Following for TC: assembly hall, classrooms and gymnasium at Finchamrd. school; 2-storey block of flats and a 11-storey block of flats, 6 dwellings and 11 garages at Vale-rd., Woolton.

LEATHERHEAD.—Mrs. A. M. Cook proposes 14 dwellings adjoining the 'Pantiles,' Harriotts-la., Ashtead; 30 flats at the rear of Zenda Cottage, Woodfield-la., Ashtead, for Marine Property Investments (Brighton) Ltd. Inquiries to be held.

LUTON.—Mr. A. Penley Smith, 55 Crowland-rd., Luton, proposes factory and offices at 7/9 Taylor-st.

NORWICH.—An ultra-modern £3m. scheme for redeveloping the heart of Norwich has been submitted to the city corporation. The proposals, drawn up by London architects for a national company of property developers, include a modern pedestrian shopping centre and business centre on the old cattle market. Provision underground has been made for 1,200 cars and a station for 50 buses. A new hotel, new banks, and more office accommodation is also envisaged.

NOTTINGHAM.—TC propose erection of new central library at Dryden-st. Est. £500,000.

OLDHAM.—Approval in principle has been given by the BC to erection of houses for sale.

OSWALDTWISTLE (Lancs.).—EC propose erection of a hostel and junior training centre at Thwaites-rd. . . . Davies Bros., Morecambe, propose erection of 150 dwellings at Aspen-la., Thwaites-rd.

OXTED.—Lawton Ltd. are planning an extensive new development in the Oxted area. Their staff architect, Mr. George E. A. Huyton, ARIBA, has designed for the Boulthurst Farm estate in Pollards Wood-rd., Limpsfield, an estate of 108 houses in a style claimed to be in keeping with the country surroundings, as an open-plan development. There will be six types of houses, ranging from 2-bedroom houses in the latest terraced 'town house' style to 4-bedroom detached houses. They will cost from £3,500 to £5,500 each.

PLATT BRIDGE.—RC Auth. propose erection of primary school to replace Holy Family RC school.

PORTADOWN (Co. Armagh).—BC have approved a scheme for the re-development area lying between West-st. and Woodhouse-st. Estimated cost is £100,000. Plans have been lodged with the Ministry.

PORTSMOUTH.—City Council is to build a single-storey block of 54 one-bedroom flats, with 32 garages, at the corner of Green-rd. and Elm-grove, Southsea. Est. cost, £199,000.

PORT TALBOT.—A civic centre to introduce 'something of a nautical tradition associated with a sea-borne town,' and multi-storey flats and hotel are included in plans for development of Aberavon seafront. The scheme has been prepared by Mr. John

Contracts Placed

We are glad to receive from architects and quantity surveyors for publication details of contracts placed to the value of £20,000 or over. Such information should reach the Editor as soon as possible after the contract is signed. Names of the architect and other consultants associated should be given.

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Morgan Harris, consultant architect, and approved in principle by the BC.

READING.—Hall, Pain and Foster, 58 Commercial-rd., Portsmouth, propose supermarket, shops and maisonettes at Basingstoke-rd. . . . Copthall Holdings Ltd. propose erection of 59 flats and 58 garages at 29/31 Bath-rd. Inquiry held. . . . Mr. Hugh Shepperd proposes a multi-storey block of flats at the junction of Westcote-rd./Southcote-rd. Inquiry held.

SANDHURST.—Mr. Joe Hutton proposes erection of 20 houses at College-rd.

SHAFTESBURY.—Prison Commissioners propose erection of security prison and 65 houses on the site of Shaftesbury School.

SHEFFIELD.—A £5m. scheme for the redevelopment of the Sheaf Valley, Sheffield, has been submitted to Sheffield Corporation by the Estates Property Investment Co. The seven-acre site is near the heart of the city, and the company claims it would become the commercial centre of Sheffield. The scheme is dominated by a 25-storey block of offices with a garden and conference hall. It would be surrounded by a multiple store, some banks, shops, showrooms, a new hotel and some flats.

SHREWSBURY.—BC propose 50-60 dwellings at Sutton-la.

SWINTON & PENDLEBURY.—Morris of Swinton proposes major alterations and extensions to existing furnishing store. . . . BC seek Min. approval to erect two blocks of flats, 6 bungalows and 4 houses, with roads and sewers, at Clifton housing estate, £28,577 est.

TISBURY (Wilts.).—Mere & Tisbury RDC recommended to approve application by Dinnodog Products Ltd., for erection of factory on site in Duck-st., Tisbury.

UP HOLLAND.—A. & J. Mucklow & Co. Ltd. propose erection of 81 dwellings at off Chequer-la.

UXBRIDGE.—Air Ministry propose extensions at RAF Station. Architects: Threadgold and Elsey, 1 Vine-st., Uxbridge.

WIGAN.—BC propose erection of multi-storey car park at Millgate. . . . Tanfield Building Co. propose erection of 23 pairs dwellings off Shevington-la. . . . E. Little proposes re-building garage and car showroom at Miles-la., Shevington. . . . Wigan Rugby Union FC propose erection of two-storey clubhouse and changing accommodation at Brook Mill Farm, Haigh.

WOODFORD GREEN (Essex).—A 'garden estate' of old people's bungalows is planned for a site now covered by the long back-gardens of houses in Montalt-rd., Woodford Green. The Montalt-rd. houses have been converted into modern, light and airy flats after acquisition by the council.

YORK.—TC propose erection of 152 dwellings and 34 garages at Windsor Garth. . . . C.A.S. (Industrial Developments) Ltd. propose erection of offices and showroom at Piccadilly.

TENDERS

(A) Denotes *accepted*.
(PA) Denotes *provisionally accepted*.
(RA) Denotes *recommended for acceptance*.
(AM) Denotes *accepted subject to modification*.
(GD) Denotes *accepted subject to approval by appropriate Government Department*.

ACCRINGTON.—New two-storey offices and warehouse at Church-st. for Lionel Robinson & Co. Ltd., London. Russell Bros. Ltd., Nelson.

BATTERSEA.—Erection of eight flats at North Side, Wandsworth Common for BC. (GD) Perry's (Ealing) Ltd., 75 Uxbridge-rd., W5, £26,764. Erection of 84 dwellings for Battersea High-st. housing scheme (North section) for BC. (GD) A. A. Stuart & Sons (Glasgow) Ltd., Avenue-rd., SE25, £260,245.

BELFAST.—Erection of new headquarters at Curtis-st. for Salvation Army in Ireland. (A) Henry Scott, Doagh-rd., Whitehouse.

BIGGLESWADE.—Erection of 20 dwellings at Stotfold for RDC. (PA) A. G. Baxter Ltd., £32,380.

BRISTOL.—New church at Prewset-st. for the Trustees of the Methodist Church (A) Wilkins and Coventry Ltd., 91 Cumberland-rd., Bristol.

CARDIFF.—Following for City C: Erection of 75 dwellings and 27 garages at Caerau-la. (A) Direct labour, £148,156. Erection of 75 dwellings at Caerau-la. (A) Direct labour, £130,343. Erection of 92 dwellings and 54 garages at Caerau-la. (A) G. E. Wallis & Sons Ltd., Newport, £220,286. Erection of 61 dwellings at Caerau-la. (A) G. E. Wallis & Sons Ltd., £113,995. Erection of 21 dwellings at Caerau-la. (A) J. & H. Bradford Ltd., £38,219.

CHESTER-LE-STREET.—Erection of 94 houses at Barley Mow for RDC. Housing Architect is F. Bowman. (A) Direct labour.

COLERAINE (Co. Londonderry). — 114 houses, 14 flats and 35 garages at Millburn housing estate for BC. (A) O'Hara & McCluskey, Clady, £240,407.

DERBY.—Construction of buildings for British Railways' new engineering laboratories and research department headquarters in London-rd. for BTC. Architect: F. F. C. Curtis. (A) Wm. Moss & Sons Ltd., £1¼m.

DERBY.—New factory at Clay Cross for John Smedley Ltd. (A) J. W. Wildgoose & Sons Ltd.

DERRY (Northern Ireland).—Erection of old people's home at Moneymore for CC. (A) H. Taggart Ltd., Ballymoney, £96,787.

GOSFORTH (Northumberland).—Erection of proposed Gosforth East RC prim. sh. Architects: Pascal J. Stienlet and Son, 4 Queen-sq., Newcastle-on-Tyne. (A) R. Bowey and Son Ltd., William-st. South, Gosforth, Northumberland.

HEMEL HEMPSTEAD.—New warehouse and offices at Maxted-rd. for General Electric Co. Ltd. (A) Allen Fairhead & Sons Ltd., Enfield.

LIVERPOOL.—Warehouse and silo at South End Mills for W. O. & J. Wilson (Millers) Ltd. (A) Thos. Robinson & Son Ltd., Rochdale. Erection of stage of Faculty of Arts Building, Bedford-st., for The Senate, Liverpool University. (A) Tysons (Contractors) Ltd.

(GD) LONDON (Admiralty).—Contracts over £4,000 in value: *Cornwall:* Thermal insulation; Chancery Insulations Ltd., London, W1. *Renfrewshire:* Heating installation; Brightside Heating and Engineering Co. Ltd., Glasgow C3. *Hampshire:* Workshop extension; John Hunt Ltd., Gosport. *Devonshire:* Workshop superstructure; Dudley Coles Ltd., Plymouth. *Hampshire:* Renovation of façade; Reparatious Dreyfus Ltd., Bristol 3.

(GD) LONDON (Air Ministry).—Contracts to the value of £4,000 or over for week ended September 22: *Building work:* Bracknell, Berks.; J. M. Jones & Sons Ltd., Maidenhead, Berks. Finningley, Yorks.; J. Dixon (Doncaster) Ltd., Doncaster, Yorks. North Front, Gibraltar; Constructors Ltd., Cannon-la., Gibraltar. Scampton, Lincs.; Wm. Wright & Son (Lincoln) Ltd., Park-st., Lincoln. Anglesey; Seddon (Stoke) Ltd., Fenton, Stoke-on-Trent, Staffs. Sumburgh, Shetlands; R. Pert & Sons Ltd., Montrose, Angus. Topcliffe, Yorkshire; F. Shepherd & Son Ltd., Richmond, Yorkshire. *Runway work:* London (Heathrow) Airport, Hounslow, Middx.; J. Murphy & Sons Ltd., Finsbury Park, London, N4. Stansted, Essex; Universal Highways Ltd., Ronfant Station, Crawley, Sussex. *Artificers' work:* West Malling (Kent) etc.; H. Godsell & Son Ltd., Maidstone, Kent. Shawbury (Shropshire), etc.; Whitchurch (Salop) Contractors Ltd., Whitchurch, Shropshire. Church Lawford (Warwickshire) etc.; Clarke Bros. (Leamington) Ltd., Leamington Spa, Warks. Bicester (Oxon.) etc.; Bosworth Wakeford & Stepnell Ltd., Rugby, Warwickshire. Hereford; J. Houston Ltd., Blakemere, Hereford. *Painting work:* Bridgnorth, Shropshire, Cosford, Staffs and Hereford; M. A. Appleton (Contractors) Ltd., Wolverhampton. Heston, Middlesex, White Waltham, Berkshire; William Herd & Co. Ltd., Baker-st., London, W1. Uxbridge, Middlesex; P. J. Hartel (London) Ltd., Leeland-rd., London, W13. Hemswell, Kirton Lindsey (Lincs) etc.; J. D. Tighe & Co., Kirton Lindsey, Gainsborough, Lincs.

(GD) LONDON (British Railways)—New London Midland Contracts: Cleaning and painting of Liverpool Exchange station: Arundel (Contractors) Ltd., Bradford, Yorkshire; new signal box at Nuneaton: William D. Randall (Hartshill) Ltd., Hartshill, Nuneaton; installation of steam heating in millwrights shop at locomotive works, Crewe: Truswell & Son Ltd., Newcastle, Staffs.; repairs to roof over repair shops at generating station, Stonebridge Park: Kelsey Roofing Industries Ltd., London, W.1; alterations and re-decoration at St. Pancras Chambers to form a new office accommodation for London (Midland) Divisional traffic manager: James Carmichael Ltd., London, SW18.

(GD) LONDON (MoW).—Contracts placed for week ended September 9: *Berkshire:* Erection of telephone exchange at Sun Passage, Windsor; Clayton Heath Ltd., Boynewks., Maidenhead. Drainage to test track at road research laboratory, Crowthorne; Turriff Construction Ltd., Great West-rd., Brentford, Middx. *Derbyshire:* Alterations at National Assistance Board, Alvaston Camp, Alvaston; Waller (Littleover) Ltd., Thornhill-rd., Littleover. *Glamorgan:* Completion of automatic telephone exchange at Porth; David Lewin (Builders), Ltd., Measgwyn, Williamstown, Tonypandy. *Gloucestershire:* Internal decorations at Govt. Building, Elmbridge Court, Gloucester; Ford & Weston Ltd., 542 Osmaston-rd., Derby. Internal decorations at Empire Hotel, Bath; J. W. Knight & Sons, 3/4 Beau-st., Bath. *London:* Office at Customs & Excise, Royal Albert Dock; J. Mowlem & Co. Ltd., 91 Ebury Bridge-rd., SW1. Alterations for inquiry bureau at telephone exchange, Willesden, NW10; R. Denham & Sons (Construction) Ltd., 120 Fortune Green-rd., NW6. Internal decorations at Govt. Buildings, Kidbrooke Park-rd., SE3; Spraycraft Co. Ltd., 101 Palace-rd., Bromley, Kent. *Middlesex:* Firebreak partitions at public records office, Bourne-av., Hayes; Durasteel Ltd., Oldfield-la., Greenford. *Shropshire:* Erection of Post Office workshop at Shrewsbury; John Bromley & Sons, 74 Watling-st., Church Stretton. *Warwickshire:* Erection of Post Office at Alcester; Aspley & Co. Ltd., Evesham.

(GD) LONDON (MoW).—Contracts placed for week ended September 16: *Buckinghamshire:* Water mains at rocket propulsion establishment, Westcott; J. B. Edwards & Co. Ltd., Kenley House, Kenley-la., Kenley, Surrey. *Hampshire:* Occupational services at Government Offices, 8 Ogle-rd., Southampton; Brazier & Son Ltd., 303-305 Portswood-rd., Southampton. *Lancashire:* Extension to Liverpool North automatic telephone exchange, Limekiln-la., Liverpool; David Lesley (Contrs.) Ltd., 9 Chapel Walks, South Castle-st., Liverpool 1. *London:* Interior cleaning and decorations at Lansdowne House, Berkeley-sq., W1; Architectural Decorators Ltd., 79 Eccleston-sq., SW1. *Middlesex:* Heat transfer tunnel at national physical labora-

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tory, Teddington; Foster Yates & Thom Ltd., PO Box No. 21, Canal Work, Blackburn, Lancashire. *Northumberland:* Alterations to building no. 2, Longbenton, Newcastle; Tate & Holmes Ltd., Benwell Village, Newcastle-on-Tyne 5. *Somerset:* Provision and erection pre-fabricated building, Admiralty, Foxhill, Bath; F. Pratten & Co. Ltd., Midsomer Norton, nr. Bath.

(GD) LONDON (War Dept.).—Recent contracts placed for week ended Sept. 15: *Ayrshire:* Sectional building at Irvine; Scottish Aviation Ltd., Prestwick. *Dorset:* Roofing at Bovington Camp; Maurice Hill Ltd., Horndean. Building at Bovington Camp; Arthur Parsons & Sons, Puddletown. *Herefordshire:* Roofing at Rotherwas and Pontrilas; McCarthy Ltd., London, W1. *Kent:* Electrical work at Chatham and Maidstone area; H. T. Barden Ltd., Maidstone. Roadwork at the Isle of Grain; A. H. Hooker & Sons Ltd., Maidstone.

MANCHESTER.—Extensions to Every-st., Ancoats, for Manchester University Settlement Council. (A) Vic Hallam Ltd., Nottingham.

MIDDLESBROUGH.—Erection of ENT out-patient dept. at North Riding Infirmary for Newcastle Regional Hospital Bd. (A) G. H. Rogers, £17,195.

NEW MALDEN.—Extensions to printing works at West Barnes-la. for Bradbury Wilkinson & Co. Ltd. (A) Sir Robert McAlpine & Sons Ltd.

NOTTINGHAM.—Following for Sheffield Reg. Hosp. Board: Conversions to Basford Hospital. (A) Thomas Fish & Sons Ltd., £49,932. New day and treatment rooms at Sherwood Hospital. (A) W. J. Simms Sons & Cooke Ltd., £28,617.

SHOREDITCH.—Erection of block 11, and 14 garages, at the Colville estate for MBC. (GD) Walter Lawrence & Son, Ltd., £43,173.

STOKE-ON-TRENT.—New three-storey warehouse at Slippery-la., Hanley, for A. G. Hackney & Co. Ltd. (A) Phillips Bros. (Silverdale) Ltd.

SWINDON.—New factory and office block for Square 'D' Ltd. at Rodbourne industrial estate. Architects: H. Stanley Smith. (A) R. Costain Ltd., £400,000.

WAKEFIELD.—New control tower for new railway marshalling yard at Healey Mills, Yorks., for BTC. Architects: R. Pickles & Ptnr. (A) Mitchell Construction Co. Ltd., £75,000.

WALSALL.—New factory at Fryers-rd., Bloxwich, for Lander & Partner Ltd. (A) W. H. Whitehouse & Son (Builders) Ltd.

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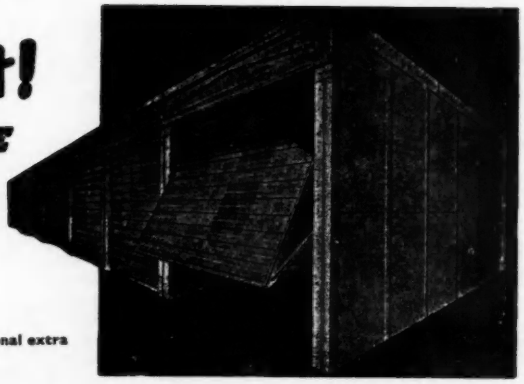

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